

19980312.qrp v01\_n027.qrs.980312

Date: Thu, 12 Mar 1998 19:06:44 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 1027

QRP-L Digest 1027

Topics covered in this issue include:

- 1) [5807] Stuff for Sale  
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- 2) [5808] Re: Problem Converting Lat/Long !!  
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 3) [5809] W1HUE DE WB0GAZ  
by David Feldman <dgf@netcom.com>
- 4) [5810] 38 Special for trade  
by Bill Boose <wboose@ptd.net>
- 5) [5811] QRN/M on 20  
by Fred Lesnick <flesnick@Quetico.tbaytel.net>
- 6) [5812] Shy Fox to raise head  
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- 7) [5813] 2N2222 Design Project  
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 8) [5814] Re: 2N2222 Design Project  
by Bob Liesenfeld <wb0poq@visi.com>
- 9) [5815] TTF Scouting  
by K4NK <K4NK@aol.com>
- 10) [5816] Questions  
by "Steve" <steve@pell.net>
- 11) [5817] Re: Converting Lat/Long?  
by "Arthur Moe" <KB7WW@chatusa.com>
- 12) [5818] RE: Questions  
by Conrad <radman@best.com>
- 13) [5819] Lat/Long Conversions  
by kb9iua@juno.com (Kevin L Anderson)
- 14) [5820] Re: All day QRN/M on 20 meters!  
by kd4zkw <kd4zkw@amsat.org>
- 15) [5821] Re: NORCAL Announcement & the post-postmodern apotheosis of Kenny  
by KV1V <KV1V@aol.com>
- 16) [5822] Re: Converting Lat/Long?  
by LYN WILLIAMS <designserv@ipass.net>
- 17) [5823] Plate tuning  
by "Robert W. Shaw" <lycott@fox.nstn.ca>
- 18) [5824] Dayton Room - Sharing  
by Dave Fifield <fifield@pacbell.net>
- 19) [5825] DX contests

- by joel malman <malman@world.std.com>
- 20) [5826] Elmer 101: Measuring Diodes  
by Dave Sjolin <sjolin@swbell.net>
- 21) [5827] Re: Chassis Dry Transfer Labels/stencils  
by GERALDCUND <GERALDCUND@aol.com>
- 22) [5828] Re: All day QRN/M on 20 meters!  
by "George T. Baker" <w5yr@swbell.net>
- 23) [5829] Re: Plate tuning  
by "George T. Baker" <w5yr@swbell.net>
- 24) [5830] FS - OHR QRP Spirit 20m and 38s w/enclosure  
by "Timothy J. Pettibone" <tpettibo@nmsu.edu>
- 25) [5831] FS:MFJ462B code reader  
by W7LS <w7ls@blarg.net>
- 26) [5832] DATAK Transfer Letters  
by Paul Harden <pharden@aoc.nrao.edu>
- 27) [5833] Another SMD parts source  
by mike czuhajewski <wa8mcq@abs.net>
- 28) [5834] Re: Elmer 101: Measuring Diodes  
by LYN WILLIAMS <designserv@ipass.net>
- 29) [5835] Re: Elmer 101: Measuring Diodes  
by Walt Amos <waltk8cv@ameritech.net>
- 30) [5836] Re: Elmer 101: Measuring Diodes  
by Roger Braker <msebrakr@telepath.com>
- 31) [5837] Invitation to Foxers  
by camqrp@cyberg8t.com (Cam Hartford)
- 32) [5838] It takes a super antenna and expensive equipment to QSO..  
by "Jeff M. Gold" <JGold@tntech.edu>
- 33) [5839] Another off-topic science report  
by "ALAN KAUL" <alan.kaul@worldnet.att.net>
- 34) [5840] Re: Another SMD parts source  
by Kent Torell <torell@sicom.com>
- 35) [5841] Re: Another off-topic science report  
by Chris Trask <ctrask@primenet.com>
- 36) [5842] Re: It takes a super antenna and expensive equipment to QSO..  
by Chris Cartwright <ccart@dns.vidtel.com>
- 37) [5843] Re: Problem Converting Lat/Long !!  
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 38) [5844] VCX0  
by "Joseph street 1635" <joseph.street@comdev.ca>
- 39) [5845] Re: It takes a super antenna and expensive equipment to QSO..  
by "Ken Hanks" <kennfd@ibm.net>
- 40) [5846] Dweeb Reply, No Folklore  
by "James R. Duffey" <ji3m@maxwell.com>
- 41) [5847] Circad question  
by Roger Hightower <n7kt@earthlink.net>
- 42) [5848] Re>MARS PATHFINDER (qrp but not amateur radio)  
by herr@ridgecrest.ca.us (Michael Herr)
- 43) [5849] Re: VCX0

by Ed Loranger <we6w@qsl.net>  
44) [5850] Re: Elmer 101: Measuring Diodes  
by Dave Sjolin <sjolin@swbell.net>  
45) [5851] QRP Pizza for Gary Diana in Mountain View  
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
46) [5852] Re: Elmer 101: Measuring Diodes(long)  
by Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>  
47) [5853] RE: Re>MARS PATHFINDER (qrp but not amateur radio)  
by Kevin Muenzler <wb5rue@stic.net>  
48) [5854] Re: Elmer 101: Measuring Diodes  
by "George T. Baker" <w5yr@swbell.net>  
49) [5855] RE: Elmer 101: Measuring Diodes  
by Kevin Muenzler <wb5rue@stic.net>  
50) [5856] Re: Elmer 101: Measuring Diodes  
by Arjen Raateland <Arjen.Raateland@vyh.fi>  
51) [5857] DK3  
by "Jeff M. Gold" <JGold@tntech.edu>  
52) [5858] Antenna Idea  
by Steven Weber <kd1jv@moose.ncia.net>  
53) [5859] Features  
by Brad Mugleston <bmug@gwl.com>  
54) [5860] Elmer 101  
by "Caro, Carlos" <carlos.caro@lmco.com>  
55) [5861] Thankyou  
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
56) [5862] Re: Elmer 101: Measuring Diodes  
by launerb@crl.com (William H. Launer)  
57) [5863] Re: Thankyou  
by "Richard E. Robinson" <rerobins@newmail.uncc.edu>  
58) [5864] FS: Timewave 599ZX DSP  
by "Allan G. Taylor" <ataylor@heracles.llnl.gov>  
59) [5865] A BIG TU to all of QRP-L  
by "Steve Galchutt" <n0tu@webaccess.net>  
60) [5866] Re: Elmer 101: Measuring Diodes  
by Steven Weber <kd1jv@moose.ncia.net>  
61) [5867] Re: Another off-topic science report  
by kd4zkw <kd4zkw@amsat.org>  
62) [5868] RE: DK3  
by "James C. Owen, III" <owen@piper.eeel.nist.gov>  
63) [5869] Re: Thankyou  
by Bob Bayha <rbayha@ix.netcom.com>  
64) [5870] sorry  
by tom whalen <whalen@swcp.com>  
65) [5871] Re: Diode arrowhead  
by "Bob Duckworth" <wb4mnf@atl.org>  
66) [5872] QRP ARTICLE?  
by ARDUJENSKI <ARDUJENSKI@aol.com>  
67) [5873] Re: Thankyou

by Paul Harden <pharden@aoc.nrao.edu>  
68) [5874] Re: Thankyou  
by adams@chuck.dallas.sgi.com (Chuck Adams)  
69) [5875] Re: Another off-topic science report  
by Dave Sjolín <sjolin@swbell.net>  
70) [5876] more asteroid sites including moving pix xf11  
by "Alan Kaul" <alan.kaul@worldnet.att.net>  
71) [5877] RE: Stuff for Sale  
by Larry East <w1hue@amsat.org>  
72) [5878] Re: Another off-topic science report  
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>  
73) [5879] Re: DK3  
by Chris Cartwright <ccart@dns.vidtel.com>  
74) [5880] Thanks a Lot  
by adams@chuck.dallas.sgi.com (Chuck Adams)  
75) [5881] Screwdriverama  
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>  
76) [5882] Re: Another off-topic science report  
by Ed Tanton <n4xy@bellsouth.net>  
77) [5883] Re: Another off-topic science report  
by Mike - W0TMW <crucis@sky.net>  
78) [5884] Elmer's Code  
by Kevin Muenzler <wb5rue@stic.net>  
79) [5885] Re: DK3  
by Thomas Jennings <jennings@eng14.rochny.uspra.abb.com>  
80) [5886] Re: Another off-topic science report  
by LYN WILLIAMS <designserv@ipass.net>  
81) [5887] 599ZX DSP is SOLD  
by "Allan G. Taylor" <ataylor@heracles.llnl.gov>  
82) [5888] Elmer 101, RF probes  
by Mel Evans <MelEvansGM6JAG@compuserve.com>  
83) [5889] Re: Elmer's Code  
by Mike - W0TMW <crucis@sky.net>  
84) [5890] + & - ve flows  
by Mel Evans <MelEvansGM6JAG@compuserve.com>  
85) [5891] Re: It takes a super antenna and expensive equipment to QS0..  
by Andy Fox <foxes@theriver.com>  
86) [5892] New Virus HOAX (Yet Another One)  
by Joe Gervais <vole@primenet.com>  
87) [5893] Re: Another off-topic science report  
by LYN WILLIAMS <designserv@ipass.net>  
88) [5894] Re: Another off-topic science report  
by Chris Trask <ctrask@primenet.com>  
89) [5895] RE: DK3 Antenna  
by Jeff Grudin <grudin@pacific.vdbs.com>  
90) [5896] Descriptions needed of 38 special, norcal 40-9er  
by kd4zkw <kd4zkw@amsat.org>  
91) [5897] Re: AL7FS finally hits a good night

- by Tellefsen Bob-CNSE97 <cNSE97@lmpsil02.comm.mot.com>
- 92) [5898] Re: Screwdriverama  
by "Bob Edwards, W4ED" <w4ed@flash.net>
- 93) [5899] FT-747 Schematic  
by Niel Skousen <nskousen@scientech.com>
- 94) [5900] Portable ant  
by Tellefsen Bob-CNSE97 <cNSE97@lmpsil02.comm.mot.com>
- 95) [5901] MFJ Ant. Analyzer GDO coils  
by "rohre" <rohre@arlut.utexas.edu>
- 96) [5902] O-Scope Probes 10:1 100 MHz for trade.  
by Ed Loranger <we6w@qsl.net>
- 97) [5903] Re: Another off-topic science report  
by kd4zkw <kd4zkw@amsat.org>
- 98) [5904] 2N2222 Receiver  
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 99) [5905] Re: Thankyou  
by jerrydeen@juno.com (Gerald A Huldeen)
- 100) [5906] Re: Screwdriverama  
by kd4zkw <kd4zkw@amsat.org>

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Date: Wed, 11 Mar 1998 17:02:42 -0700  
From: Larry East <w1hue@amsat.org>  
To: qrp-l@lehigh.edu  
Subject: [5807] Stuff for Sale  
Message-ID: <3.0.3.32.19980311170242.0090e100@eloi>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I have the following items that may be of use to someone:

1. SWAN WM-1500 Wattmeter (Forward/Reflected power indications; calibrated in Watts, NOT SWR). Nice large 4in. meter; has 50W/500W/1500W full scale settings. For HF use only (not exactly QRP...).  
\$30 shipped (in the US).
2. "Original" NorCal paddle kit (the one with the wide-spaced paddles).  
\$30 shipped (in the US).
3. TiCK-1 keyer kit; includes TiCK-1 microprocessor (8-pin DIP), PC board and all board mounted parts. Only requires push button switch and key jack (available from Radio Shack) and 6V - 14V DC supply (9V battery will work OK). Special stuff NOT normally supplied with these kits:
  - 2N7000 FET keying transistor (in place of 2N2222).
  - LM2936 ultra-low idle current, low dropout 5V regulator (in place of 78L05 -- which draws more current than the TiCK!).
  - Variable sidetone output (via board mounted pot).

\$15 shipped (anywhere).

4. Not exactly QRP related, but maybe someone can make use of these:  
386DX-25 CPU and 387DX-25 FP Processor. These were removed from a working  
mother board that I replaced. \$10 for the pair (shipped in the US).

If I get more than one request for any of these items, I'll put the names  
in a hat and draw the winner(s) on Monday.

72, Larry W1HUE/7

Reply direct to: w1hue@amsat.com

-----  
Date: Wed, 11 Mar 1998 16:06:35 -0800  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: <alan.kaul@worldnet.att.net>, "Low Power Amateur Radio Discussion" <qrp-  
l@lehigh.edu>  
Subject: [5808] Re: Problem Converting Lat/Long !!  
Message-ID: <01bd4d4a\$b8bffb30\$309f5ecf@double\_trouble.reliablemeters.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Alan --

There would appear to be an error in each of the two examples, and one error  
in your question. :-)

The difference between the two longitude answers is 15 seconds, not  
minutes, and at a latitude of 42 degrees, the position error is  
approximately 0.18 nautical mile (not statute mile), or around a thousand  
feet.

In the first solution, it would appear that the second iteration of  
hundredths to sixtieths conversion was not performed. In other words, he  
correctly calculated 0.89 degrees to be 53.40 minutes, but did not then  
convert 0.40 minutes plus the remaining 0.0004 degrees to 25 seconds,  
incorrectly reporting 0.40 minutes as 40 seconds.

In the second solution, the longitude calculation is correct; however, the  
latitude calculation was the victim of a dropped decimal point in the  
seconds calculation, which should be 4.8 seconds. This error is  
approximately 0.72 nautical miles.

In other words, close enough for pointing beams with fewer than 40 elements over distances exceeding 100 miles, and close enough for mi/w awards.

For extra credit, can you spot the error(s) in my explanation?

As an aside, in celestial nautical navigation, we usually express locations in degrees, minutes, and decimal minutes.

Mike K1MG

-----Original Message-----

From: Alan Kaul <alan.kaul@worldnet.att.net>

To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>

Date: Wednesday, March 11, 1998 1:15 PM

Subject: Problem Converting Lat/Long !!

>TWO DIFFERENT MESSAGES -- TWO DIFFERENT SOLUTIONS, AND TWO DIFFERENT

>GEOGRAPHIC LOCATIONS 15-MINUTES APART.

>WHY...BECAUSE LAT/LONG NOTATION HAS A CODE OF IT'S OWN---IT'S NOT A

>FOUR-PLACE-DECIMAL-FRACTION-OF-A-DEGREE (or at least it's not always that

>way). LOOK AT THE FOLLOWING POSTS FROM EARLIER TODAY:

>

><As a former Military LN instructor I think I can help you out

><87.8904.divide 89 by 100,then multiply that answer by 60.

><Always remember the first two numbers,in this case ( 89)

><is 100th of a minute so divide by 100 at all times then X the answer by 60

><minutes.Anything left over,repeat the above to get your seconds

><For 87.8904,I got a reading of 87 deg. 53 minutes and 40 seconds

><The first two numbers are always based on 100

><Bob

><WA2HOQ

>- - - - -

>

>>41.9014      .9014 x 60 = 54.08      54.08 min      41' 54

>              08 x 6 = 48              48      sec      41' 54" 48s

>>87.8904      .8904 x 60 = 5342      53.42 min      87' 53'

>              4.2 x 6 = 25.2      25.2      sec      87' 53" 25s

>>Accuracy?    Pretty close!

>>Theory?      Dunno, but it is close enough for my yagi when I'm

>>getting beam headings.

>>73      Hank      K8DD

>-----

>COMMENTS ANYONE? DOES THE 15-MINUTES DIFFERENCE MATTER

>WHEN POINTING A YAGI? DOES IT MATTER WHEN CALCULATING MILES PER WATT?

>

>Alan Kaul, W6RCL, LaCanada, CA

>w6rcl@amsat.org  
>http://home.att.net/~alan.kaul/qrp.html  
>

-----  
Date: Wed, 11 Mar 1998 16:16:48 -0800 (PST)  
From: David Feldman <dgf@netcom.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5809] W1HUE DE WB0GAZ  
Message-ID: <199803120016.QAA15498@netcom3.netcom.com>

Larry my e-mail to you bounced - could you drop me an e-mail to  
dgf@netcom.com?

Tnx,

73 Dave WB0GAZ dgf@netcom.com

-----  
Date: Wed, 11 Mar 1998 19:25:54 -0500  
From: Bill Boose <wboose@ptd.net>  
To: qrp-1@Lehigh.EDU  
Subject: [5810] 38 Special for trade  
Message-ID: <3.0.1.32.19980311192554.006cc204@postoffice.ptd.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I would like to trade an unstarted 38s kit for a Norcal Paddle kit. Wide  
or narrow. If no interest, I will entertain other offers.

Bill Boose, N3WST, Lititz, Pa

-----  
Date: Wed, 11 Mar 1998 19:23:34 -0500  
From: Fred Lesnick <flesnick@Quetico.tbaytel.net>  
To: qrp-1@Lehigh.EDU  
Subject: [5811] QRN/M on 20  
Message-ID: <35072B06.43B1@tbaytel.net>  
Mime-Version: 1.0



Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

The band is in great shape here for no noise,nice and quiet except for a few FISTS members calling CQ on 14058.

Fred VE3FAL  
FISTS 2337

-----  
Date: Wed, 11 Mar 1998 16:30:38 -0800  
From: Bob White <bobwhite@accesscom.com>  
To: qrp-l@lehigh.edu  
Subject: [5812] Shy Fox to raise head  
Message-ID: <199803120030.QAA22633@ns2.accesscom.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: quoted-printable

Rumor has it that W03B will be poking his head out of the 7.038 hole for a quick search horizon to horizon on Friday the 13th 04-0600 UTC. He will be showing a small target so look close to the North West of San Jose.=

-----  
Date: Wed, 11 Mar 1998 19:35:54 -0500  
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>  
To: qrp-l@lehigh.edu  
Subject: [5813] 2N2222 Design Project  
Message-ID: <3.0.1.16.19980311193554.3c1f0018@mail49.mci2000.com>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii

Well, after many weeks of doing geeky computer modeling using the MicroSim PSPICE demo freeby program, I finally build the receiver portion of my 2N2222, 40 meter CW xceiver. And it works GREAT!!

Here is the lineup. Front end is a pair of top coupled LC filters into a common base r.f. amp using 1 2N2222.. That is followed by a hand built double balanced mixer using 1N914/1N4148 diodes. Local oscillator drive is from a 2.1 MHz VFO that is really stable and uses 3 more 2N2222's. The mixer then feeds a common base amplifier using another 2N2222, which in turns drives a 3 pole, variable bandwidth (200 - 800 Hz) crystal filter on 4.195 MHz. Out of the crystal filter, into a common base to common emitter i.f. amplifier using another 2 2N2222s. These then feed a hand built, single balanced mixer, serving

as the product detector, also using 1N914/1N4148 devices. The BFO for the product detector is a single 2N2222 running as a Colpitts oscillator. After a bit of filtering of the product detector output, the signal goes to an audio amp comprised of 4 2N2222s, two of which are the push-pull output pair, which are being driven by another pair to create the required drive. The rig is VERY quiet, and hears everything that the FT990 can, maybe a bit more! All toll, only 12 2N2222s used thus far, which leaves 10 more for the transmit section and the T/R switching. Looks like Wayne called it about right setting the limit at 22 active devices.

This is a FUN project. Can't wait to see what others are doing at Dayton. As Steve would say.....MELT SOLDER!

72.....Jim

Jim Kortge, K8IQY (ex NU8N)		NorCal, QRP-L
jokortge@mci2000.com		__o H.F. bicycle mobile
Fenton, MI		_`\<, Mizuho 17/40 SSB
...	..	(*)/(*)
NorCal 38S/30 Log	-	34 States; 40 Countries - Running 3 watts
Most recent -	Iowa	Mauritius

NorCal 38S/17 Log	-	22 States; 51 Countries - Running 1.5 watts
Most recent -	Alaska	Ecuador

-----  
Date: Wed, 11 Mar 1998 19:55:03 -0600  
From: Bob Liesenfeld <wb0poq@visi.com>  
To: qrp-l@lehigh.edu  
Subject: [5814] Re: 2N2222 Design Project  
Message-ID: <35074077.2F4615C4@visi.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Jim Kortge, K8IQY wrote:

>  
> Well, after many weeks of doing geeky computer modeling using the  
> MicroSim PSpice demo freeby program, I finally build the receiver  
> portion of my 2N2222, 40 meter CW xceiver. And it works GREAT!!

I would love a schematic of this. Could you post one to my E-mail?

72

--

Genuine E-mail From the Land of the Everlasting Icicle...

Bob Liesenfeld

wb0poq@visi.com

-----  
Date: Wed, 11 Mar 1998 20:33:23 EST  
From: K4NK <K4NK@aol.com>  
To: qrp-l@lehigh.edu  
Subject: [5815] TTF Scouting  
Message-ID: <dac11140.35073b65@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

I will be taking a little trip this sunday and scout for the trail leading to the point where SC, GA , and NC all meet. It is where I will be for the Nor Cal TTF . I will be taking a nor cal -40a with me this week and perfect my set up. Since I have never been there before and maybe will get lost I will take an extra battery for S.O.S on 7.040. Listen for me sunday the 15th around 2pm on 7.040.I will sign K4NK/4/4/4.

Thanks Les K4NK

-----  
Date: Wed, 11 Mar 1998 19:46:45 -0000  
From: "Steve" <steve@pell.net>  
To: <qrp-l@lehigh.edu>  
Subject: [5816] Questions  
Message-ID: <199803120147.UAA56690@nss4.cc.Lehigh.EDU>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hi my name is Steve and I am new to this group so please forgive me if I ask a question that has been asked before.

I am a tech plus who would like to get into some qrp work but most of the qrp radios I have came across are out of the freq range that I can legally work. I do know about the SGC2020 but would like to talk with someone who has one of these radios to see what they thought about it. Now are there anyothers out there for me to try??? Hopefully it wont be long till I can upgrade to General class but for now I would like to work some

qrp any comments or suggestions would be most helpful      Thank you  
Steve      KB4PTH

-----  
Date: Wed, 11 Mar 1998 18:18:37 -0800  
From: "Arthur Moe" <KB7WW@chatusa.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5817] Re: Converting Lat/Long?  
Message-ID: <01bd4d5d\$2a7a5740\$ae5833d1@arthur-moe>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I have found, for me what is a neat tool for doing this and other things like adding subtracting dividing and fractions, doing polar conversions and much more. Price \$10.00 its a Sharp EL 903 calculator. Put in Lat/Long either way and get it out the other. Add fractions like  $3/79 + 356/956$  In a flash. Found it at the local discount office supply store. Yes, it has all the TRIG functions also.

No, I don't work for or own stock in either.  
73's  
art  
KB7WW@SignalONE.com  
OK, So what's the speed of dark??????

-----Original Message-----

-----Original Message-----  
From: ukii <ukii@megsinet.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Date: Wednesday, March 11, 1998 6:30 AM  
Subject: Converting Lat/Long?

>Hello Gang.  
>Well,I certainly dont want this question to become a  
>lesson in trigonometry but...

>I am trying to enter my coordinates in a logging program.  
>I got my lat/long off of a Buckmaster callbook at they use  
>something like 87.8904N. My problem is that I need to convert  
>that to minutes/seconds which is what the callbook needs.  
>Trying to enter 87.8904 gives the error,OUT OF RANGE  
>Minutes/SECONDS to 59.  
>Please,can one of you A+B=Fruitsalad people convert the following?  
>41.9014 N and 087.6723 W to a minutes second deal.  
>  
>Also,on a recent thread started by someone....  
>>??? I mean like this has to be the most marvelous magic invention of all  
>times!!! You put hot things in, they come out hot... You put cold things  
>in, they come out cold... How do it know ???  
>>  
>sounds like my microwave! Is that right Chuck?  
>Where is NilsBul,anxiously awaiting his answer  
>on the Pos/Neg deal!!!! Maybe he is having trouble converting  
>"big words" to "small words"???  
>  
>Thanks Much Gang.  
>73 de john  
>n9ukx  
>  
>  
>

-----  
Date: Wed, 11 Mar 1998 18:21:50 -0800  
From: Conrad <radman@best.com>  
To: "'steve@pell.net'" <steve@pell.net>, Low Power Amateur Radio Discussion <qrp-  
l@Lehigh.EDU>  
Subject: [5818] RE: Questions  
Message-ID: <01BD4D1A.904B8A00@radman.vip.best.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: quoted-printable

Steve,

Welcome! I doubt you'll find anyone on the list who actually \*has\* an =  
SCC-2020 as they're not yet shipping. Many of us are awaiting... and =  
awaiting... and awaiting :) There are other multi-band rigs that will =  
allow you to work QRP. The Ten-Tec "Argonaut" or "Scout" are somewhat =  
classic choices and can be found used. In addition many conventional =  
rigs will power-down to QRP power levels with simple modification to the =

ALC jack. This opens the door to a much broader range of choices. If you =  
enjoy building things (kits) you might consider a mono-band QRP rig for =  
40 meters... allowing you to work the novice sub-band for now and later =  
the more desirable (lower) end of the band at the 7040 Mhz QRP calling =  
freq. I built an Oak Hills Research OHR-100A 40 meter QRP transceiver =  
that will cover either 70 khz segment of the 40 meter CW band. Novice =  
now... General/Extra later! They're about a hundred bucks.

Just my 2 cents... again welcome to QRP!

72 - Conrad - nn6cw.

\*\*\*\*\*

To: Low Power Amateur Radio Discussion

Subject: Questions

Hi my name is Steve and I am new to this group so please forgive me =  
if

I ask a question that has been asked before.

I am a tech plus who would like to get into some qrp work but most =  
of

the qrp radios I have come across are out of the freq range that I can  
legally work. I do know about the SGC2020 but would like to talk with  
someone who has one of these radios to see what they thought about it. =  
Now

are there anyothers out there for me to try??? Hopefully it wont be long  
till I can upgrade to General class but for now I would like to work =  
some

qrp any comments or suggestions would be most helpful Thank you =  
=20

Steve KB4PTH =20

-----  
Date: Wed, 11 Mar 1998 21:23:10 EST

From: kb9iua@juno.com (Kevin L Anderson)

To: QRP-L@Lehigh.EDU

Subject: [5819] Lat/Long Conversions

Message-ID: <19980311.202711.7823.0.kb9iua@juno.com>

A point of confusion was raised about two similar but different  
processes and answers offered up to "ukii" query..

The correct answer goes to.... "marty", who wrote:

```
> Take the decimal portion (only) and multiply by 60. 87.6723W, take the
=> 0.6723
> times 60 =3D 40.338 minutes. Take the decimal and multiply by 60
again.=
> 0.338
> times 60 =3D 20.28 Seconds. So, we get 87 deg. 40 min. 20.28 sec W.

> Repeat for latitude ...
```

Yep. To convert from Decimal Degrees (DD) to Degrees/Minutes/Seconds (DDMMSS) is a two(three)-step process, using the decimal (remainder) portion against 60.

For the record, to go from DD MM SS to DD is done by:

$$DD = DD + (MM / 60.0) + (SS / 3600.0)$$

Also, by convention longitude west may also appear as a negative number, as does latitude south.

Cheers/73. Kevin, KB9IUA

Professional Geographer/GIS Analyst Extraordinaire  
Civil Servant (U.S. Army Corps of Engineers)  
Former College Professor (like Chuck, K5F0)  
(...enough already :-)

\*\*\*\*\*  
Kevin Anderson, KB9IUA, Rock Island IL USA  
kb9iua@juno.com or Kevin.L.Anderson@usace.army.mil  
\*\*\*\*\*

---

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Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

---

Date: Wed, 11 Mar 1998 21:51:23 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: Vic Rosenthal <rakefet@rakefet.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [5820] Re: All day QRN/M on 20 meters!

Message-ID: <Pine.LNX.3.95.980311214708.3453T-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 11 Mar 1998, Vic Rosenthal wrote:

> I've heard something like this on 24 and 18 MHz. Joel's description is accurate.  
> Does anyone have any idea what this is?

Check the propagation reports. It's probably got something to do with the geomagnetic storm that's going on. I did get minnesota on 10m today, but it was QRO ( 25W ).

BTW, the milliwatter I ordered for 40 meters should be here on saturday or early next week. I'm hoping to be able to get it built sometime next week. I am probably going to need a 100 foot run of coax to a wire dipole with a balun, that I'm going to put up into the tree. Does anyone have any idea what type of coax is best for a 100 foot run ???  
For 40 meter qrp, that is. We'll be rock bound on 7.110, but it's a start. OK, 73.

-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
http://www.dialisdn.net/user/cdlevin

-----  
Date: Wed, 11 Mar 1998 21:36:29 EST  
From: KV1V <KV1V@aol.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5821] Re: NORCAL Announcement & the post-postmodern apotheosis of Kenny  
Message-ID: <3992d74f.35074a2f@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Nils wrote

<< [blah blah ...] And what about modern? Was there a "pre-modern" that we didn't find out about until after the pre-postmodern stuff? I mean, there should be definitive levels of postmodernism here, right? Like there's



modern, ok? And then there's post-modern which ain't quite pre-postmodern, 'cause the postmodern is one word and there'd be a post-modern which is a hyphenated word, right? [some more blah, blah]>>

Nils: Do not go into synaptic meltdown --- the answer is simple. DECONSTRUCT it, then un-deconstruct it to produce a post-deconstructed reconstituted ... something (I seem to have lost track of what "it" is or was).

I remember now! Kenny lives! and therefore must be "it".

Note: A spell checker works in a spell check room at a witch restaurant. This is clearly ante-historic but there is no record of this fact.

Is NORCAL a new diet drink or what?

72&3 SK - Bob Moore KV1V

-----  
Date: Wed, 11 Mar 1998 21:54:40 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: KB7WW@chatusa.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5822] Re: Converting Lat/Long?  
Message-ID: <350778A0.6BE59514@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Arthur Moe wrote:

> OK, So what's the speed of dark?????  
>

Obviously, it depends on the dark constant of the medium through which the dark is traveling. For example, the dark constant of a standard refrigerator door is 0, therefore dark will travel at 0% of its normal speed through a refrigerator door. To prove this, just try to remember whether you have ever seen a totally dark refrigerator door. Nope. Doesn't happen. All the dark is safely contained inside without leaking. Of course, when the door is opened, the little darksucker inside instantly sucks up all the dark anyway.

Hope this answers your question.

Lyn

-----  
Date: Wed, 11 Mar 1998 22:30:24 -0500  
From: "Robert W. Shaw" <lycott@fox.nstn.ca>  
To: <qrp-1@Lehigh.EDU>  
Subject: [5823] Plate tuning  
Message-ID: <3.0.5.32.19980311223024.00797d60@fox.nstn.ca>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Can anyone give me an explanation of the dip in plate current when the plate tank is tuned to resonance, and why the plate current rises again when the resonant tank link coupling to the antenna system is increased? I have not had much experience with tube finals. (I'll promise to keep the plate power below 5 watts!!!).

Thanks in advance.

72/73 de Bob--Amateur Radio Station VE3SUY (lycott@fox.nstn.ca)  
Robert W. Shaw, Ottawa, Ontario, Canada

Visiting Disney in Florida? -- see  
<<http://fox.nstn.ca/~lycott/florida9.html>>

-----  
Date: Wed, 11 Mar 1998 19:52:03 -0800  
From: Dave Fifield <fifield@pacbell.net>  
To: QRP List <qrp-1@Lehigh.EDU>  
Subject: [5824] Dayton Room - Sharing  
Message-ID: <35075BE3.1D37@pacbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have a room confirmed for FDIIM at the Day's Inn South, Dayton and would like to share the cost with someone if there is anyone who would like to buddy up. The rooms have two queen size beds and are eminantly shareable. Please drop me a line by email (fifield@pacbell.net or David\_Fifield@3Com.com)

if you'd like to take me up on the offer. If you snore loudly or smoke, please don't bother to reply!

Can't wait to see the K2 from Elecraft and hear what Norcal is up to now!!??? See you all there in May.

Dave Fifield, AD6AY

-----  
Date: Wed, 11 Mar 1998 23:03:38 -0500  
From: joel malman <malman@world.std.com>  
To: qrp-l@lehigh.edu  
Cc: malman@world.std.com  
Subject: [5825] DX contests  
Message-ID: <199803120403.AA29185@world.std.com>

Folks,

A few folks asked about the ARRL DX contest from here on the East Coast. Funny you should ask -- as it seems the West Coast was blasting through to Europe, as least on 15 meters (the only band I worked the contest).

I did work the contest for about 8 hours and worked 74 DX stations. Best DX was 9X0 (Rawanda), TT8 (Chad), 5X1 (Uganda), so it would seem that 15 was open a lot to Africa. But I also did work Hawaii (twice) and 3 JA's in a row. There was also Q's to HC, OA, ZP, LU and 4M. A 100 on the fun meter.

Sure is neat when the DX stations need us small pistols to pad their score!

/joel      wa1qvm

-----  
Date: Wed, 11 Mar 1998 22:23:34 -0600  
From: Dave Sjolín <sjolin@swbell.net>  
To: Qrp-l Reflector <qrp-l@lehigh.edu>  
Subject: [5826] Elmer 101: Measuring Diodes  
Message-ID: <35076346.CE6632BA@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi all:

I have an easy question. When you are measuring a diode with a DMM, is the positioning of the probes important? I guess the question is there polarity involved in measuring a diode? If so, what is the proper way to make the measurement? Does this vary by type of diode or ratings of the diode?

Sorry to be ignorant but most of my DMM usage in the past has been checking for shorts and occasionally checking DC voltage. Never have used the current scales ( guess that had something to do with the need to open the circuit to make the measurement).

Thanks in advance. 73 de Dave, N0IT

-----  
Date: Thu, 12 Mar 1998 00:13:38 EST  
From: GERALDCUND <GERALDCUND@aol.com>  
To: crucis@sky.net  
Cc: qrp-1@Lehigh.EDU  
Subject: [5827] Re: Chassis Dry Transfer Labels/stencils  
Message-ID: <1247823e.35076f05@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Mike

DC Electronics in Scottsdale Az has them in their catalog. Datamark is the manufacturer most mmentioned in my catalogs. \$4.95 each

DC Electronics  
PO Box 3203  
Scottsdale AZ 85271-3203  
1-(800)-467-7736  
1-(800)-423-0070

HosfeltElectronics has them at a higher price. \$8.95-\$13.25

Hosfelt Electronics,Inc  
2700 Sunset Blvd  
Steubenville OH 43952-1158  
!- (800)-524-6464

And Ocean State (if they're still in business) had them in their 94-95 catalog. \$4.95 also.

Ocean State Electronics  
PO Box 1458  
6 Industrial Dr  
Westerly RI 02891  
1-(800)-866-6626

Radio Shack carried them years ago but I haven't seen any in our stores here in Louisville.

I hope this helps.

Gerald,KE4LIA

-----  
Date: Wed, 11 Mar 1998 23:31:45 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: kd4zkw@amsat.org  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5828] Re: All day QRN/M on 20 meters!  
Message-ID: <35077341.E3149B2F@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

450-ohm ladder line and a tuner connected to the rig through a short length of any convenient coax.

kd4zkw wrote:

>  
> On Wed, 11 Mar 1998, Vic Rosenthal wrote:  
>  
> > I've heard something like this on 24 and 18 MHz. Joel's description is accurate.  
> > Does anyone have any idea what this is?  
>  
> Check the propagation reports. It's probably got something  
> to do with the geomagnetic storm that's going on. I did  
> get minnesota on 10m today, but it was QRO ( 25W ).  
>  
> BTW, the milliwatter I ordered for 40 meters should be here  
> on saturday or early next week. I'm hoping to be able to get  
> it built sometime next week. I am probably going to need a  
> 100 foot run of coax to a wire dipole with a balun, that I'm  
> going to put up into the tree. Does anyone have any idea what  
> type of coax is best for a 100 foot run ???  
> For 40 meter qrp, that is. We'll be rock bound on 7.110, but it's

> a start. OK, 73.

>

>

> | Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
> | http://www.diaisdn.net/user/cdlevin |

>

>

--

73, George  
Amateur Radio W5YR  
QRP-L #1373  
QRP ARCI #9583  
AutoPOWER Systems  
Fairview, TX

-----

Date: Wed, 11 Mar 1998 23:57:21 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: lycott@fox.nstn.ca  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5829] Re: Plate tuning  
Message-ID: <35077941.5BE613BA@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

At resonance a parallel LC tank circuit presents a high impedance.  
Effectively, this reduces the plate current producing the "dip." Off the  
resonant frequency, the tank impedance is decreased, thus effectively  
allowing more plate current to flow.

Robert W. Shaw wrote:

>

> Can anyone give me an explanation of the dip in plate current when the  
> plate tank is tuned to resonance, and why the plate current rises again  
> when the resonant tank link coupling to the antenna system is increased? I  
> have not had much experience with tube finals. (I'll promise to keep the  
> plate power below 5 watts!!!).

>

> Thanks in advance.

>

> 72/73 de Bob--Amateur Radio Station VE3SUY (lycott@fox.nstn.ca)  
> Robert W. Shaw, Ottawa, Ontario, Canada

>

> Visiting Disney in Florida? -- see

> <<http://fox.nstn.ca/~lycott/florida9.html>>

--

73, George  
Amateur Radio W5YR  
QRP-L #1373  
QRP ARCI #9583  
AutoPOWER Systems  
Fairview, TX

-----  
Date: Wed, 11 Mar 1998 23:27:46 -0700  
From: "Timothy J. Pettibone" <[tpettibo@nmsu.edu](mailto:tpettibo@nmsu.edu)>  
To: [qrp-l@Lehigh.EDU](mailto:qrp-l@Lehigh.EDU)  
Subject: [5830] FS - OHR QRP Spirit 20m and 38s w/enclosure  
Message-ID: <[3.0.3.32.19980311232746.00688158@dante.nmsu.edu](mailto:3.0.3.32.19980311232746.00688158@dante.nmsu.edu)>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I'm leaving town for a few days. I'll check my e-mail Sunday night. The following for sale:

OHR QRP Spirit already built for 20m with Curtis Keyer built in. 5w out. Very nice rig. \$150 or BO.

38S kit/keyer chip/San Luis enclosure - best offer. Think I paid \$30 for 38S and \$25 for enclosure, can't remember what I paid for keyer chip. This one is unbuilt.

Bids with best prices will be selected Sunday night and I'll notify "winners". Thanks.

Tim K50I  
Las Cruces, NM

p.s. Got to get some of this stuff out of the shack!

-----  
Date: Thu, 12 Mar 1998 00:26:39 -0800  
From: W7LS <[w7ls@blarg.net](mailto:w7ls@blarg.net)>  
To: [qrp-l@Lehigh.EDU](mailto:qrp-l@Lehigh.EDU)

Subject: [5831] FS:MFJ462B code reader  
Message-ID: <35079C3F.2FB6@blarg.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi, all. I have a nice, nearly new MFJ462B code reader that I can part with. Reads CW, RTTY, ASCII, AMTOR (two different flavors, even). See it in the catalog or on their web site. I'd like to swap it for some QRP goodie or sell for \$125. Selling new (currently) for \$169.

Looking for a White Mountain 75 meter rig, too.

73 de Jim, W7LS

-----  
Date: Thu, 12 Mar 1998 01:41:05 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [5832] DATAK Transfer Letters  
Message-ID: <Pine.SOL.3.91.980312012318.15769A@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

DATAK dry transfer ruboff letters have been around for years. The type I use are the ones with just the alphabet and numerals rather than the canned words. The sheets are about 4x5 and come in black or white letters. We have been having a hard time finding vendors that still sell them. So the QRP-L thread got me motivated to make a few calls today.

DATAK \*is\* still listed in the EEM sourcebook. Called them. They have moved in the past few years (due to being bought out) from New Jersey to Nevada to now in Illinois. Their sales for rub-off letters are down because people lost track of them. They do \*not\* sell their products directly. So they gave me a couple names of distributors.

Called one and they were zits, basically telling me they weren't gonna piddle around with rinky dink mail orders from hams. Wrote them off.

The second place was very nice and said they would sell DATAK sheets on a onzie-twozie basis. So they are sending me a catalog and price list, which I'll post to the group when I receive it and see if they are competitive with the other brands.



For those unfamiliar with rub-off letters, they are letters printed on a plastic or wax backed sheet. You position the letter you want on your painted front panel and "rub-if-off" with a soft pencil and it sticks to the panel for making custom legends. Once done, I usually apply a couple of light coats of Krylon "Fixatif" spray or similar, then a coat of clear lacquer if you wish. (The letters can dissolve or run if you apply a heavy first coat - trust me!). With a little care to keep the letters straight and balanced, it will be as close to a professional H-P or Tektronix look as you can get.

BTW ... a little H-P trivia.

Anyone know the name of the light grey paint used on virtually all Hewlett-Packard equipment? It is called "H-P MINT GREY" and is patented by H-P and manufactured by their approval only. All of our modules at the observatory are H-P Mint Grey and it's always a pain finding a paint shop that has the license to use the stuff. Individual spray cans from H-P are about \$30 a can! But must admit, I have several QRP rigs I painted with H-P Mint Grey, and a K1MG DCC Frequency Counter, and it does look nice. I won't elaborate where the can of paint came from, however :-)

72, Paul NA5N

-----  
Date: Thu, 12 Mar 1998 08:03:35 -0800  
From: mike czuhajewski <wa8mcq@abs.net>  
To: QRP forum <qrp-1@Lehigh.EDU>  
Subject: [5833] Another SMD parts source  
Message-ID: <35080757.2FE8@abs.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Bob Kellog posted a list of SMD parts sources a couple days ago but he left out one of my favorites. It's "baggybob", AKA Bob Kelly of Lake Geneva, WI. I don't think he's a ham, but I have been buying from him at Dayton for 3 years so far. He always has a couple boxes filled with little plastic bags (which is why people started calling him baggybob), filled with SMD parts for a buck a bag. (Yes, he has them well labeled and in order....at least for the first few hours before people start mixing them up!) He has a goodly supply of capacitors (tantalum, ceramic, silver mica), some semiconductors, and a resistor assortment (but not individual values of resistors). He also has some small value RF chokes.

He also does this by mail order, and I'm getting ready to send him a \$25 order. Please don't ask how much I've spent in person at Dayton over the years!

If anyone is interested in seeing the list of what he has, let me know and I'll forward the e-mail list he sent me in December. Lots of goodies, and good prices.

73 and Queue Our Pea de WA8MCQ      wa8mcq@abs.net

-----  
Date: Thu, 12 Mar 1998 08:14:23 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: sjolin@swbell.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5834] Re: Elmer 101: Measuring Diodes  
Message-ID: <350809DE.3F01DF69@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Dave Sjolin wrote:

> Hi all:  
>  
> I have an easy question. When you are measuring a diode with a DMM, is  
> the positioning of the probes important? I guess the question is there  
> polarity involved in measuring a diode? If so, what is the proper way to  
> make the measurement? Does this vary by type of diode or ratings of the  
> diode?  
>  
> Sorry to be ignorant but most of my DMM usage in the past has been  
> checking for shorts and occasionally checking DC voltage. Never have  
> used the current scales ( guess that had something to do with the need  
> to open the circuit to make the measurement).  
>  
> Thanks in advance. 73 de Dave, N0IT

Dave,

Use the resistance-measuring function to check a known-good diode. Measure resistance of the diode in both directions. One

should show a much lower resistance. If it does not, then the diode is bad or you are using the meter wrong. As long as you check the diode in both directions (reverse the meter leads) the positioning of the probes is not important. Some relatively rare diodes are difficult to check this way, such as the very high voltage diodes used in the high voltage supplies in microwave ovens, but most diodes you encounter in typical ham usage can be checked this way.

73,  
Lyn, W4WDN

-----  
Date: Thu, 12 Mar 1998 13:24:44 +0000  
From: Walt Amos <waltk8cv@ameritech.net>  
To: sjolin@swbell.net, qrp-1@Lehigh.EDU  
Subject: [5835] Re: Elmer 101: Measuring Diodes  
Message-ID: <3507E21C.91450EEE@ameritech.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Morning Dave:

Think before you type.....

You must do these things for yourself!

You have arrived at the conclusion that you are using an ohmmeter to check an item that is polarity sensitive. It could be a capacitor , transistor or diode and many other components.

Scratch your head and think , how would I determine what polarity my test leads are?

Well , you could look at the schematic of your meter, that's one way.

Another way , ( treat it like a battery ) is to barrow or take your meter to a friends house and use his meter. Put your meter in the ohm's position and just read the polarity on his meter, in the voltage position, just like you would check a battery. Have your meter in the ohm's position. His in the voltage position. It can change for different scales so check them all. Some meters have a 1 1/2 volt battery and a 9 volt battery and different voltages will come out with different settings.

Now that wasn't hard, you could have figured that out! Always sit down and think before typing.

Now , why is it a problem that the voltage might be higher on some settings of the ohm meter?

Now , what is a diode used for? Does it pass current in both directions? What is that little arrow and line on there for? Inquiring minds would go to the Handbook and look up diodes in the index.

Now, why is it important where you leave your voltmeter when you turn it off, and why should that NOT be in the ohm position?

Now you are thinking!

Walt k8cv

-----  
Date: Thu, 12 Mar 1998 09:00:50  
From: Roger Braker <msebrakr@telepath.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5836] Re: Elmer 101: Measuring Diodes  
Message-ID: <3.0.1.16.19980312090050.627fac52@telepath.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Aren't most test leads color coded?? Seems that would be the easiest way to tell. Also, measuring a battery, if you hook up the test leads "backwards", don't most meters give you - voltage reading??

73,  
Arnold kd5ckh

At 01:24 PM 3/12/98 +0000, you wrote:

>Morning Dave:

>

>Think before you type.....

>

>You must do these things for yourself!

>

>You have arrived at the conclusion that you are using an ohmmeter to

>check an item that is polarity sensitive. It could be a capacitor ,

>transistor or diode and many other components.  
>  
>Scratch your head and think , how would I determine what polarity my  
>test leads are?  
>  
>Well , you could look at the schematic of your meter, that's one way.  
>  
>Another way , ( treat it like a battery )is to barrow or take your meter  
>to a friends house and use his meter. Put your meter in the ohm's  
>position and just read the polarity on his meter, in the voltage  
>position, just like you would check a battery. Have your meter in the  
>ohm's position. His in the voltage position. It can change for different  
>scales so check them all. Some meters have a 1 1/2 volt battery and a 9  
>volt battery and different voltages will come out with different  
>settings.  
>

-----  
Date: Thu, 12 Mar 1998 06:03:40 -0800 (PST)  
From: camqrp@cyberg8t.com (Cam Hartford)  
To: qrp-1@Lehigh.EDU  
Subject: [5837] Invitation to Foxers  
Message-ID: <199803121403.GAA29857@key.cyberg8t.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

This Sunday, March 15, is the first annual Novice/Tech+ Sprint. You-all are invited to crank your knobs up to the Novice CW portion of your favorite band, crank your keyer speed down, and join in the fun. This is going to be like a 4 Hour Fox Hunt, with the N/T+ stations as the Foxes, and all others as the Hunters. Everyone can work everyone else, but the big points will come from snagging the N/T+ stations.

Just to let evryone know who is who, Novices should sign their call followed by /N, and Techs should sign with /T.

Rules follow.

72/73,

Cam Hartford N6GA  
QRP ARCI Contest Manager

-----

NOVICE/TECH+ SPRINT

Date/Time:

March 15, 1997; 2000 - 2400 Z

Exchange: RST, State/Province/Country, Name

Novices sign CALL/N, Tech+ sign CALL/T

QSO Points:

N/T+ to N/T+ = 25 Points

N/T+ to Non N/T+ = 10 Points

Non-N/T+ to Non N/T+ = 5 Points

Power Multiplier:

0 - 250 MW = X 15;                      250 MW - 1 Watt = X 10

1 W - 5 W = X 7;                      Over 5 W = X 1.

Suggested Frequencies:

80 Meters                      3710 KHz

40 Meters                      7110 KHz

15 Meters                      21110 KHz

10 Meters                      28110 KHz

Score:

Points (total for all bands) X Power Multiplier

Entry may be Single-Band or Multi-Band. Certificate to the overall winner.

Certificates to the top three finishers in both Novice/Tech+ and

Non-Novice/Tech+

categories. Certificates to top three places in each Single-Band and Multi-Band class. The contest manager reserves the right to recognize special significant entries with a certificate award.

Entry includes a copy of the logs and a separate summary sheet. Include duplicate check sheets with entries of 100 QSOs or more. Indicate total time-on-the-air, and include a legible name, call, and address.

All entries must be received within 30 days of the contest date. Late entries will be counted as check logs. The highest power used will determine the power multiplier. Output power is considered as 1/2 of input power.

Entries are welcome via E-Mail to [CamQRP@cyberg8t.com](mailto:CamQRP@cyberg8t.com), or by mail to:

Cam Hartford, N6GA  
1959 Bridgeport Ave.  
Claremont, CA 91711

-----

Date: Thu, 12 Mar 1998 08:17:13 -0600  
From: "Jeff M. Gold" <JGold@tntech.edu>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5838] It takes a super antenna and expensive equipment to QSO..  
Message-ID: <001501bd4dc1\$8d9ac800\$4d0b9595@mm-man.cc.tntech.edu>  
MIME-version: 1.0  
Content-type: text/plain; charset="iso-8859-1"  
Content-transfer-encoding: 7bit

Well was on the old TT Argosy II last night using my Gap vertical and the AT-11 tuner to get my Gap to believe it could function on 30 meters. Now we all know you need to read all those big thick antenna books to realize that the Gap is basically functioning as a big dummy load.

Well talked to Craig, WB3GCK in Phoenixville, PA (PA has really weird city names), afte we talked for a bit he told me he was using a Ten Tec C22 (only DC receiver I ever could tolerate), then he told me he was using his rain gutter as an antenna.. he was 549, and the band wasn't feeling all that well.

Can't wait to try to tune up my old electric fence.

72

Jeff, AC4HF

=====

Jeff M. Gold, Ed.S.  
Manager, Academic Computing Support  
Tennessee Technological University

-----  
Date: Thu, 12 Mar 1998 07:23:20 -0800  
From: "ALAN KAUL" <alan.kaul@worldnet.att.net>  
To: <qrp-l@Lehigh.EDU>  
Cc: <akaul@nbc.com>  
Subject: [5839] Another off-topic science report  
Message-ID: <19980312152328.AAA18640@oemcomputer>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

The asteroid that might hit Earth in 30-years is a hot topic with nothing to do with qrp Amateur Radio -- but this list is the only way I have to tell so many of my friends about something that I think is absolutely remarkable on the Internet.

For anyone interested in learning more (and perhaps showing their kids or grandkids an image of an asteroid spinning in orbit---compiled from radar images captured at Arecibo by JPL scientist Scott Ostro and "animated" by a Washington State University scientist named Scott Hudson) check the website:

<http://www.eecs.wsu.edu/~hudson/Toutatis/toutatis.html>

Scroll down to "3-D Model" and click on downloading the animated 288 mpeg image. It takes a few seconds (depending on your baud rate) but it is pretty amazing!

It's not qrp, sorry if bandwidth offends.

73/72 de Alan Kaul, W6RCL, LaCanada-Flintridge, CA  
<http://home.att.net/~alan.kaul/qrp.html>  
[alan.kaul@worldnet.att.net](mailto:alan.kaul@worldnet.att.net)  
[w6rcl@amsat.org](mailto:w6rcl@amsat.org)

-----  
Date: Thu, 12 Mar 1998 08:02:06 -0700  
From: Kent Torell <[torell@sicom.com](mailto:torell@sicom.com)>  
To: [qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)  
Subject: [5840] Re: Another SMD parts source  
Message-ID: <[v04003a00b12da7c88571@\[192.91.202.41\]](mailto:v04003a00b12da7c88571@[192.91.202.41])>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Bob Kellogg posted a list of SMD parts sources a couple days ago but he  
>left out one of my favorites. It's "baggybob", AKA Bob Kelly of Lake  
>Geneva, WI.

A couple of us at work ordered about \$70 worth of parts from him a month ago, and have been very satisfied. The chip caps we got were actually marked in value ... I never really believed any manufacturer did that, although there have been rumors. Nicely done, quality parts, at a really good price. Transistors, diodes, zeners, chip caps, resistors, tantalums. 75% of the stuff you need to build a really tiny transceiver :-)

Mike can send you the list ([wa8mcq@abs.net](mailto:wa8mcq@abs.net)) or you can e-mail bob at [baggybob@elknet.net](mailto:baggybob@elknet.net). Mike will be faster, as bob only checks his e-mail every few days.

Kent Torell    [torell@sicom.com](mailto:torell@sicom.com)    602-607-4852  
SICOM    7585 E. Redfield, #202    Scottsdale, AZ    85260



AB70A scQRPion, qrp-1 57, ARCI 9075 DM33xn 33.55 N 112.078 W

Date: Thu, 12 Mar 1998 08:43:57 -0700 (MST)  
From: Chris Trask <ctrask@primenet.com>  
To: ALAN KAUL <alan.kaul@worldnet.att.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5841] Re: Another off-topic science report  
Message-ID: <Pine.BSI.3.96.980312084116.25919A-100000@usr05.primenet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, ALAN KAUL wrote:

```
>
> The asteroid that might hit Earth in 30-years is a hot topic with nothing
> to do with qrp Amateur Radio -- but this list is the only way I have to
> tell so many of my friends about something that I think is absolutely
> remarkable on the Internet.
>
```

Oh, I wouldn't say that. If it brushes the atmosphere we'll have one whappaloosa of a metoer scatter ionization event. 850

It will also be an interesting opportunity to try bouncing signals off something other than the moon.

[illegible]

## Circuit Design for the RF Impaired

Chris Trask / N7ZWY  
Principal Engineer  
ATG Design Services  
P.O. Box 25240  
Tempe, Arizona 85285-5240

Technical Editor,  
QRP Quarterly  
QRP ARCI 9464

Email: [ctrask@primenet.com](mailto:ctrask@primenet.com)  
<http://www.primenet.com/~ctrask>

Graphics by Loek Frederiks

-----  
Date: Thu, 12 Mar 1998 11:55:07 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-l@Lehigh.EDU>  
Subject: [5842] Re: It takes a super antenna and expensive equipment to QSO..  
Message-ID: <Pine.LNX.3.93.980312115329.769A-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, Jeff M. Gold wrote:

> talked to Craig, WB3GCK in Phoenixville, PA (PA has really weird city names)

Hey! Wait a minute, I'm a PA boy, born an bred! And you're exactly right :)  
Look down around Lancaster PA, you have Bird-in-Hand, Scaggsville,  
Intercourse (Formerly Cross Keys, who thought the new name was better?),  
Yoe, and Philadelphia. Take a look, I'm not making any of this up.

OBQRP: well, they're all "small" towns...

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --  
-- N3XRV ARRL-VE QRP WAS 28/13(w/c) | http://dns.vidtel.com/~ccart --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --

-----  
Date: Thu, 12 Mar 1998 07:49:42 -0800  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [5843] Re: Problem Converting Lat/Long !!  
Message-ID: <01bd4dce\$78f0f160\$309f5ecf@double\_trouble.reliablemeters.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

It appears that I have offended someone by pointing out calculation errors.  
I apologize. The correction was not intended as criticism.

Now I'll go back to doing what I should be doing: offending people at work!

Mike K1MG

-----  
Date: Thu, 12 Mar 1998 10:55:19 EST5EDT  
From: "Joseph street 1635" <joseph.street@comdev.ca>  
To: qrp-1@Lehigh.EDU  
Subject: [5844] VCX0  
Message-ID: <1AFB5783648@mercury.camb.comdev.ca>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

Has anyone seen any designs for a variable oscillator based on one of those TV type ceramic resonators instead of using a crystal. They should allow a wider pull range for the oscillator. This is for an 80 meter vfo obviously.

Joe

-----  
Date: Thu, 12 Mar 1998 11:09:10 -0500  
From: "Ken Hanks" <kennfd@ibm.net>  
To: <JGold@tntech.edu>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5845] Re: It takes a super antenna and expensive equipment to QSO..  
Message-ID: <01bd4dd1\$3188e280\$607e2581@kh>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Jeff:

Some of the best antennas I have used (especially in my early novice and general days) would not have worked if I had read the theory. A Hustler trap vertical with 1 radial straight down over poor earth and a 130 foot dipole at 20 feet fed with 100+ feet cheap RS RG-58 coax to a tuner worked a lot of stateside and DX for me.

Feedline loss? Attenuation due to high SWR? I did not know about it and

these and several other similar antennas worked.

Reminds me of a Bugs Bunny cartoon where one of the characters chases Bugs off a cliff and falls, while Bugs stays in the air. He admits it violates the law of gravity but says "I never studied law"

What works is whatever gets the signal into the air so someone else can receive it.

SOMETIMES (but not too often) ignorance is bliss.

73,

Ken K1XS@ibm.net

-----  
Date: Thu, 12 Mar 1998 09:16:38 -0700  
From: "James R. Duffey" <ji3m@maxwell.com>  
To: adams@chuck.dallas.sgi.com (Chuck Adams)  
Cc: qrp-1@Lehigh.EDU  
Subject: [5846] Dweeb Reply, No Folklore  
Message-ID: <v03007807b12dad099037@[192.31.66.158]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Chuck - Having deftly avoided the "which way does current flow? discussions", and sitting on my hands so as to not further extend the discussion to post that "holes", not positrons are responsible for current in p type semiconductors, you finally sucked me in with;

"On page 16.21 in the section on printed circuit boards there is a formula:

$$I = 3 * \text{cube\_root}(w * w)$$

where I is recommended current density in amps and w is the width of the copper track in millimeters (my spelling on mm).

Anyone have a derivation or source for this formula?"

I don't, but my guess is that this equation was determined empirically. I have seen similar, but not identical, equations cited elsewhere. If you do a dimensional analysis, that "3" contains a lot of weird science! Also that equation seems to be independent of trace thickness, so it must be quoted for a standard thickness. One also needs to assume that this is for a

certain voltage drop per unit length of trace or for a certain temperature rise of the copper trace. The w\*w looks weird, but recall that the resistance of a square of uniform material is independent of the size of the square; that is a 1 inch square of copper has the same resistance measured from edge to edge as a one foot square piece of copper! Can you derive that? I knew you could. Ohms/square is used as a design parameter in thin/thick film resistor fabrication.

"So those with time on their hands and PC board facilities could make up some traces of various widths on a scrap piece of board and do some destructive testing."

I actually had the pleasure of getting to do this for a living about 16 or 17 years ago at Hughes. At that time the Space and Communications division had a couple of premature failures in space. Fuses would blow, even though an overcurrent condition apparently did not exist! The problem was eventually traced to the fuses not having a hermetic seal. As the gas leaked out the amount of convection cooling of the fuse wire went down and the fuse blew at a much lower current density than the rating in an atmosphere. We got some IR&D money to make thin film fuses by depositing aluminum on glass and then etching the fuse trace from the aluminum. The dominant cooling mechanism is radiation and conduction for this type of fuse. Halfway through the program somebody came out with such a device commercially and we didn't get to finish the program. I made a lot of fuses out of many different geometries this way and blew them up. Hughes has my notebook from that period and I don't recall much about the experiemnts. - Duffeyqrp-1@lehigh.edu

James R. Duffey (505) 764-3143  
Principal Scientist (505) 843-7995 (FAX)  
Maxwell Technologies Inc/Albuquerque Division  
Suite 300  
2501 Yale Blvd SE  
Albuquerque, NM 87106

-----  
Date: Thu, 12 Mar 1998 09:30:29 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: qrp-1@Lehigh.EDU  
Subject: [5847] Circad question  
Message-ID: <3507AB35.AC8780E6@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Now that I'm gathering up books and software for the Elmer project, to build on my self-taught electronics know-how, I have run into a problem with the demo version of Circad.

A couple of folks have sent me files for circuits, but I'm having trouble bringing them up in Circad. It doesn't like the .pcx files I've received, but I can't find anything in the help files as to why. There seems to be a dearth of documentation other than the embedded help files.

Did I miss downloading some instructions? Can someone point me to a source for documentation? This is not an intuitive program, and massive doses of ginkgo biloba don't seem to fire up the brain, :-)

I'm sure that Circad isn't a firm requirement, but it might be nice to be able to play with it as we go along.

TIA, de Roger, N7KT

--

72/73, de Roger, N7KT

-----  
Date: Thu, 12 Mar 1998 08:36:28 -0800 (PST)  
From: herr@ridgecrest.ca.us (Michael Herr)  
To: qrp-1@Lehigh.EDU  
Subject: [5848] Re>MARS PATHFINDER (qrp but not amateur radio)  
Message-ID: <v01530501b12df710fec8@[199.120.150.141]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
> Mars Pathfinder was pronounced "dead" today at 1:21pm Pacific Time  
>  
I had the blessing of working on the Pathfinder and having some that work sitting on Mars now. This was by far the best program I had ever worked on or ever will. Pathfinder did her job and captured our imagination again of what we can do if we want to. May she sleep peacefully.

72

Mike Herr  
WA6ARA

-----

Date: Thu, 12 Mar 1998 16:41:57 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: joseph.street@comdev.ca  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5849] Re: VCX0  
Message-ID: <35081055.491A@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have a bag of about 40 of these. I took one apart and figured it was some kind of ceramic resonator.

Do you know the frequency? How to experiment with it? I didn't see a use for these 9 years ago when I found them but maybe now?

-Ed

Joseph street 1635 wrote:

>  
> Has anyone seen any designs for a variable oscillator based on one of  
> those TV type ceramic resonators instead of using a crystal. They  
> should allow a wider pull range for the oscillator. This is for an 80  
> meter vfo obviously.  
>  
> Joe

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Thu, 12 Mar 1998 10:44:36 -0600  
From: Dave Sjolín <sjolin@swbell.net>  
To: waltk8cv@ameritech.net  
Cc: qrp-l@Lehigh.EDU  
Subject: [5850] Re: Elmer 101: Measuring Diodes  
Message-ID: <350810F4.170C470B@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Walt Amos wrote:

> Think before you type.....

>  
> You must do these things for yourself!  
>

Well Walt, I guess instead of saying I had an "easy" question, I should have said "stupid" question. In fact, that is how I originally worded it but I thought that was too negative. Particularly in the spirit of Elmer 101, where one should not be afraid to ask a question, no matter how stupid as long as you had an honest desire for an answer.

Looking at the question I wrote last night I see that I was truly in a stupid state. The posting completely failed to ask my real question which I am somewhat reluctant to now ask, now that I have learned about polarity and color coding of leads and such. HI

Somewhere in my 40 years of ham radio experience, I recall reading that there is some kind of solid state device that you can damage by testing it. Since diodes are supposed to conduct in one direction and have an inverse voltage rating, I thought maybe diodes were the devices I was thinking of. Since I have some diodes in a metering circuit that I want to check, I thought I would ask my stupid question before I did something stupid. My concern is probably just one of those old myths, like those you hear about antenna tuners and SWR, etc, but better safe than sorry.

1) Am I completely wrong or is there no component that you can damage by testing it? (Ohms reading)

2) Similarly, is there anyway you can damage your DMM other than attempting to measure voltage with the leads plugged into the current jacks or by attempting to measure a voltage grossly in excess of the meter's rating?

73 de Dave, N0IT

-----

Date: Thu, 12 Mar 1998 08:54:05 -0800  
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
To: <qrp-1@Lehigh.EDU>  
Subject: [5851] QRP Pizza for Gary Diana in Mountain View  
Message-ID: <01bd4dd7\$77bb1a60\$630a0d0a@doug.dpol.k12.ca.us>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit



Gary Diana, N2JGU of Embedded Research will be in the bay area the week of the 23rd of March and he has Friday night free. Gary, Dave Fifield, Ori and I will be meeting at the Pizza Place in the shopping center of the Two Guys from Italy place at the corner of Grant Road and El Camino Real. The date is Friday, Mar. 27th, and the time is 6:30. Everyone is invited, dutch treat (that is Kansas for you pay your own bill). Gary will have the newest TiCK keyer kit, and also the Tixie kits for show and tell. Bring along your latest and greatest project. Let me know if you can make it. 72, Doug, KI6DS

-----  
Date: 12 Mar 1998 11:51:00 -0500  
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>  
To: sjolin@swbell.net  
Cc: qrp-l;;  
Subject: [5852] Re: Elmer 101: Measuring Diodes(long)  
Message-ID: <1998Mar12.115100-0500@[130.113.234.7]>

In <35076346.CE6632BA@swbell.net>, Dave Sjolin wrote:

>Hi all:

>

>I have an easy question. When you are measuring a diode with a DMM, is  
>the positioning of the probes important? I guess the question is there  
>polarity involved in measuring a diode? If so, what is the proper way to  
>make the measurement? Does this vary by type of diode or ratings of the  
>diode?

I assume that you're using the DMM in "ohmmeter" mode to measure a diode.

What your DMM does here is generate a known current, pumps it out one lead (and it comes back on the other lead). Then it measures the voltage between the two leads. The voltage that it measures is proportional to the resistance that's "out there". That is  $R=V/I$  where  $I$  is the (known) current source.

Of course, if there's nothing connected between the two leads, no current can get from one lead to the other. In this case, the voltage will be very high, and the meter gives an "overrange" display.

What is a "very high" voltage? It might be a fraction of a volt. It may not even be enough to get a diode to conduct (< .6v). So some DMM's can't indicate whether a diode is good or not, because you get an open-circuit "overrange" indication with the diode connected either way across the leads.

Some of my Fluke meters can only measure diodes on one or two particular ohms scales, not other scales. Most analog meters can measure diodes - I generally use a "1000X" scale.

A Fluke 85 has a selector switch specifically for diode tests. It is basically an ohmmeter configuration as described above, with test current of 0.6ma. Any voltage it measures above 3v gives an overrange display. It will display the diode's forward voltage (about 0.6 volts for a silicon diode) when its red lead is connected to anode. Not all ohmmeters follow this convention.

I always test a diode twice: once with red lead connected to anode, once with black lead connected to anode. One test should give an "overrange" display, while the other test should give some reading - for my Fluke, something like "0.613".

You can check transistor junctions the same way - using the "base" as a reference, there should be diodes between base-emitter, and base-collector. Emitter-collector usually shows "overrange" no matter which way you connect the leads. You can catch a LOT of bad transistors with these simple tests:

```
RED  BLACK
base emitter  "0.613"
base collector "0.613"
emitter base  "overrange"
collector base "overrange"
collector emitter "overrange"
emitter collector "overrange"
```

For the Fluke, this series would indicate that a NPN silicon transistor is OK. A PNP silicon transistor would look like this:

```
RED  BLACK
base emitter  "overrrange"
base collector "overrange"
emitter base  "0.613"
collector base "0.613"
collector emitter "overrange"
emitter collector "overrange"
```

Remember, this is the Fluke red/black convention. If it was the other way, the first transistor would be a PNP, the second a NPN.

Some high-voltage diodes don't measure well with an ohmmeter. Some "Darlington" transistors don't measure well either. Some light-emitting diodes have a forward voltage of 1.8v - too much for some ohmmeters. Otherwise, most diodes or transistors should be test-able with your ohmmeter.

-----

Date: Thu, 12 Mar 1998 11:00:20 -0600  
From: Kevin Muenzler <wb5rue@stic.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,

"'herr@ridgecrest.ca.us'" <herr@ridgecrest.ca.us>  
Subject: [5853] RE: Re>MARS PATHFINDER (qrp but not amateur radio)  
Message-ID: <01BD4DA6.12DC9DC0@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

On herr@ridgecrest.ca.us, Michael Herr[SMTP:herr@ridgecrest.ca.us] wrote:

> >  
> > Mars Pathfinder was pronounced "dead" today at 1:21pm Pacific Time  
> >  
> I had the blessing of working on the Pathfinder and having some that work  
> sitting on Mars now. This was by far the best program I had ever worked on  
> or ever will. Pathfinder did her job and captured our imagination again of  
> what we can do if we want to. May she sleep peacefully.  
> 72  
> Mike Herr  
> WA6ARA  
>  
>  
>  
>

I missed this one...Is there a web page where one can read the official announcement?

Kevin, WB5RUE

-----  
Date: Thu, 12 Mar 1998 11:04:02 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: msebrakr@telepath.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5854] Re: Elmer 101: Measuring Diodes  
Message-ID: <35081582.225851FF@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

True, Roger, but most analog multimeters set to measure resistance produce a positive voltage on the BLACK or normally NEGATIVE test lead relative to the RED or normally POSITIVE test lead. This polarity must be taken into account if the ohmmeter is being used on a polarity-sensitive component, such as a diode or electrolytic capacitor. In my experience, most DMM digital meters do not display this reversal

in lead polarity when set to measure resistance. The experience of others may vary, depending upon the specific meter design and model.

--

73, George  
Amateur Radio W5YR  
QRP-L #1373  
QRP ARCI #9583  
AutoPOWER Systems  
Fairview, TX

Roger Braker wrote:

>  
> Aren't most test leads color coded?? Seems that would be the easiest way  
> to tell. Also, measuring a battery, if you hook up the test leads  
> "backwards", don't most meters give you - voltage reading??  
>  
> 73,  
> Arnold kd5ckh  
>  
> At 01:24 PM 3/12/98 +0000, you wrote:  
> >Morning Dave:  
> >  
> >Think before you type.....  
> >  
> >You must do these things for yourself!  
> >  
> >You have arrived at the conclusion that you are using an ohmmeter to  
> >check an item that is polarity sensitive. It could be a capacitor ,  
> >transistor or diode and many other components.  
> >  
> >Scratch your head and think , how would I determine what polarity my  
> >test leads are?  
> >  
> >Well , you could look at the schematic of your meter, that's one way.  
> >  
> >Another way , ( treat it like a battery )is to borrow or take your meter  
> >to a friend's house and use his meter. Put your meter in the ohm's  
> >position and just read the polarity on his meter, in the voltage  
> >position, just like you would check a battery. Have your meter in the  
> >ohm's position. His in the voltage position. It can change for different  
> >scales so check them all. Some meters have a 1 1/2 volt battery and a 9  
> >volt battery and different voltages will come out with different  
> >settings.  
> >

-----  
Date: Thu, 12 Mar 1998 11:15:09 -0600  
From: Kevin Muenzler <wb5rue@stic.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5855] RE: Elmer 101: Measuring Diodes  
Message-ID: <01BD4DA8.1F21DF80@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

On sjolin@swbell.net, Dave Sjolin[SMTP:sjolin@swbell.net] wrote:

> Walt Amos wrote:

>

> > Think before you type.....

> >

> > You must do these things for yourself!

> >

>

> Well Walt, I guess instead of saying I had an "easy" question, I should  
> have said "stupid" question. In fact, that is how I originally worded it  
> but I thought that was too negative. Particularly in the spirit of Elmer  
> 101, where one should not be afraid to ask a question, no matter how  
> stupid as long as you had an honest desire for an answer.

There are still those out there who think it isn't worth their time to  
answer "stupid questions." I wouldn't call them Elmers. The only  
stupid question is the one that wasn't asked. It is usually much better,  
and cheaper, to "humble yourself" and ask that question rather than  
destroy or damage something (or yourself.)

> Looking at the question I wrote last night I see that I was truly in a  
> stupid state. The posting completely failed to ask my real question  
> which I am somewhat reluctant to now ask, now that I have learned about  
> polarity and color coding of leads and such. HI

>

> Somewhere in my 40 years of ham radio experience, I recall reading that  
> there is some kind of solid state device that you can damage by testing  
> it. Since diodes are supposed to conduct in one direction and have an  
> inverse voltage rating, I thought maybe diodes were the devices I was  
> thinking of. Since I have some diodes in a metering circuit that I want  
> to check, I thought I would ask my stupid question before I did  
> something stupid. My concern is probably just one of those old myths,  
> like those you hear about antenna tuners and swr, etc, but better safe  
> than sorry.

>

> 1) Am I completely wrong or is there no component that you can damage  
> by testing it? (Ohms reading)

You can damage any component if you test it improperly. You test a resistor's value by applying voltage and measuring the resulting current. If you exceed the power rating of the resistor you burn it out. It is important to know those ratings before you begin your test. Some components have extremely low maximums and can be damaged quite easily by a DVM. You can damage a 2N2222 if you test it with too much current. But usually you won't damage a component by testing it with a DVM ohm meter. Some components can be damaged by just handling them too.

> 2) Similarly, is there anyway you can damage your DMM other than  
> attempting to measure voltage with the leads plugged into the current  
> jacks or by attempting to measure a voltage grossly in excess of the  
> meter's rating?  
>  
> 73 de Dave, N0IT  
>

Some DVMs can be damaged by measuring RF voltages. Usually this will be addressed in the instruction manual. If it says don't measure RF voltages then don't. If you need to measure RF voltages you can make a small RF voltage probe. Look in the ARRL handbook for this. Basically it is a germanium diode, a resistor and a capacitor. It rectifies the RF and charges the capacitor. You measure the DC voltage across the capacitor. Most good DVMs are diode protected against static damage but don't try to measure the voltage of your Van De Grafe generator.

Kevin, WB5RUE

-----  
Date: Thu, 12 Mar 1998 19:31:02 +0200  
From: Arjen Raateland <Arjen.Raateland@vyh.fi>  
To: QRP-L <QRP-L@Lehigh.EDU>  
Subject: [5856] Re: Elmer 101: Measuring Diodes  
Message-ID: <35081BD6.5FCE@vyh.fi>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-transfer-encoding: 7bit

Dave Sjolín wrote:

> 1) Am I completely wrong or is there no component that you can damage  
> by testing it? (Ohms reading)

Microwave diodes perhaps? (1N23 etc.)

--

Arjen Raateland  
Finnish Environment Institute  
SAS Support  
phone +358 9 4030 0457

-----  
Date: Thu, 12 Mar 1998 11:30:16 -0600  
From: "Jeff M. Gold" <JGold@tntech.edu>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5857] DK3  
Message-ID: <000e01bd4ddc\$859f5ec0\$4d0b9595@mm-man.cc.tntech.edu>  
MIME-version: 1.0  
Content-type: text/plain; charset="iso-8859-1"  
Content-transfer-encoding: 7bit

OK, I will admit, I just can't figure it out. How, exactly does the DK3 work. How automatic is it? How does it know when you switch bands to tune, and how does it know when the SWR is ok?

thanks  
72  
Jeff, AC4HF

=====  
Jeff M. Gold, Ed.S.  
Manager, Academic Computing Support  
Tennessee Technological University

-----  
Date: Thu, 12 Mar 1998 11:39:58  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5858] Antenna Idea  
Message-ID: <3.0.3.16.19980312113958.26df4c20@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

The recent thread on copper tape got me thinking....  
Say you took a 10 ft, 2 in dia PVC pipe and spiral wound some 2" wide aluminum tape over the length of the pipe, with about a 1/4 in gap between turns. I figure you'd use about 17 ft of tape. That's about 1/4 wave at 20

meters. Probably have to remove a few turns to make it resonate at 20. A capacitive hat would lower it to 30.

Anyone ever try something like this? I'll have to play around with this idea when the weather warms back up. (Burr, was it cold this morning!)

BTW, I remember seeing a product review and some ads in 73 a year or two ago for some 1/2" wide copper tape called "Tenna Tape" That's about all I remember. One suggestion was to stick the tape along the eaves of your house to make a dipole.

72,  
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Thu, 12 Mar 1998 10:35:19 -0700  
From: Brad Mugleston <bmug@gwl.com>  
To: "'cw'" <cw@qth.net>, "'homebrew'" <homebrew@qth.net>, "'Kenwood'" <kenwood@qth.net>, "'qrp-1'" <qrp-1@Lehigh.EDU>  
Subject: [5859] Features  
Message-ID: <01BD4DA2.8EF4F1E0@pps-pc10.gwl.com>

Thanks for all the input. I went home last night (using the advice given me) and did some research. I believe I've narrowed my search down to the following rigs (based on expected price at a swap fest). What I would like help with is determining features. I need voice for the scouts but I will use it primarily for CW and portable operations.

The rigs in question are:

FT-747 GX  
FT-757 GX  
TS-140S  
TS-440S  
IC-725  
IC-735

I want stories, what do you KNOW about these rigs. Are there any I should stay away from at any price. What would you buy for your kid, your grand kid.

Also I am still open to other suggestions.

Thanks



de KB0ROL, Brad

-----  
Date: Thu, 12 Mar 1998 10:47:53 -0700  
From: "Caro, Carlos" <carlos.caro@lmco.com>  
To: "'qrp-l@lehigh.edu'" <qrp-l@Lehigh.EDU>  
Subject: [5860] Elmer 101  
Message-ID: <98D6407B02B9D111926000805F31282206D345@cos141-gate55.ccs.lmco.com>  
MIME-version: 1.0  
Content-type: text/plain

Hi all !,  
With all the questions asked prior to the kickoff of 101, there is one subject that has not been brought up. ESD is a killer. Save some of your pennies for a wrist strap grounding device. Last night I sat and read the paper while the hot air system cycled several times. While it felt good, the moving air was charging my bod with positive ions. Then I walked on the carpet to the den and when I reached for the light switch I created a spark that could be heard. Many electronic components WILL be zapped by the 15 to 50 KILOVOLTS of static charge that can be produced. Electrostatic Discharge through a device SM, MOSFET or microwave diodes will cost in replacement and frustration of non working circuits.  
Just a reminder,  
Regards, Carlos #1333

-----  
Date: Thu, 12 Mar 1998 10:00:07 -0800  
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
To: <adams@sgi.com>  
Cc: <qrp-l@Lehigh.EDU>  
Subject: [5861] Thankyou  
Message-ID: <01bd4de0\$b0f06700\$630a0d0a@doug.dpol.k12.ca.us>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Chuck, I just wanted to take a moment and say thank you for all that you do for QRP. QRP-L is the prime mover in QRP circles today, and it all started because of an idea that you had 5 years ago. The amount of information that

has exchanged and the projects, learning and fun that have been generated are immense. This is possible because we have a forum that you are responsible for, along with Jim Eshleman. You have a thankless job. When doers do, people take shots, send flames, whine and complain, yet no one else hears about it because it comes to you, not the list. I have been guilty of not saying thank you to you often enough, and for that I apologize.

You are a true QRP'er, one who gives to others and expects nothing in return. Thank you again for providing the idea and the guidance for QRP-L which is where the action is today in QRP. Keep up the good work, and I am very proud to count you among my closest of friends. 72, Doug, KI6DS

-----  
Date: Thu, 12 Mar 1998 12:01:02 -0600  
From: launerb@crl.com (William H. Launer)  
To: qrp-l@Lehigh.EDU  
Subject: [5862] Re: Elmer 101: Measuring Diodes  
Message-ID: <v01530504b12dd025f7e7@[192.0.2.1]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

George wrote:

>but most analog multimeters set to measure resistance produce  
>a positive voltage on the BLACK or normally NEGATIVE test lead  
>relative to the RED or normally POSITIVE test lead.

I just checked the polarity of my old Eico 565 multimeter, and the red lead is POSITIVE on the Ohms scales. My Sperry DVM (DM-8400) is the same. I normally use the Eico for checking diodes and transistors. I prefer the analog meter for this because the DVM takes too long to respond. The bottom line is: use what you're comfortable with, and check the polarity. I don't think it will hurt the device under test, but can mis-identify an unknown npn device as a pnp device (or vice versa).

72/73, Bill wb0cld

Bill Launer  
St. Charles, MO  
launerb@crl.com  
wb0cld@wb0cld.ampr.org [44.46.66.25]  
qrp-l #279           qrp arci #3551  
Grid Square EM48RT

-----  
Date: Thu, 12 Mar 1998 13:05:58 -0500  
From: "Richard E. Robinson" <rerobins@newmail.uncc.edu>  
To: ki6ds@dpol.k12.ca.us  
Cc: qrp-1@Lehigh.EDU  
Subject: [5863] Re: Thankyou  
Message-ID: <v03102802b12dd3de7625@[152.15.144.42]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Doug, KI6DS, writes,

>Chuck, I just wanted to take a moment and say thank you for all that you do  
>for QRP.

Well said, Doug.

Thanks again Chuck.

72,

Rick kf4ar

-----  
Date: Thu, 12 Mar 1998 10:26:30 -0800 (PST)  
From: "Allan G. Taylor" <ataylor@heracles.llnl.gov>  
To: qrp-1@Lehigh.EDU, tentec@contesting.com  
Cc: ae6tt@qsl.net  
Subject: [5864] FS: Timewave 599ZX DSP  
Message-ID: <199803121826.KAA11174@heracles.llnl.gov>

With the imminent arrival of an upgraded OmniVI, I now need to sell my DSP box. It is a Timewave 599ZX DSP. Immaculate condition and has the latest software upgrade. Try it in those Foxhunts or pileups!

\$250, shipped CONUS.

Grant K7GT     k7gt@qsl.net     or telephone     (510) 422-1572 (days, Pacific time)

-----  
Date: Thu, 12 Mar 1998 11:25:58 -0700  
From: "Steve Galchutt" <n0tu@webaccess.net>  
To: "\"Low Power Amateur Radio Discussion\"" <qrp-l@Lehigh.EDU>  
Subject: [5865] A BIG TU to all of QRP-L  
Message-ID: <008201bd4de4\$5382b880\$844a460f@SG2939M.webaccess.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I owe a big THANK YOU to all the Elmers, info providers, nay sayers, well wishes, and just friendly commentors who have cheer lead me back into the most increadibile hobby/sport in the world. Over 18 months ago I was digging in box of junk in my garage and found a grungy J38 which was attached to my dusty old HW-8. The idea of getting on the air after ten years of silence flashed through my head. So I did...and shortly after several QS0s I began to wonder what QRP-L meet. I hit a couple of search engines with it and that began the flood of info on QRP, and QRP-L....which made my re-entry a rocket ride into the 90's of QRP ham radio! Thanks Gang your the best!!  
72...Steve

-----  
n0tu - solar powered QRP & wire antennas @ 7,200' ASL  
Monument, Colorado - Grid Sq DM79nb  
email: n0tu@webaccess.net

-----  
Date: Thu, 12 Mar 1998 13:35:17  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5866] Re: Elmer 101: Measuring Diodes  
Message-ID: <3.0.3.16.19980312133517.11afd2b2@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
>1) Am I completely wrong is or is there no component that you can damage  
>by testing it? (Ohms reading)

Back in them there "olden days" the ohms scale in a VOM used a 1.5 volt battery in series with the meter and a resistor to set the scale. The high ohms scale uses a small resistor and you could blow the junction,

especially if were a germanium type. Also, transistors weren't nearly as rugged then as they are today. Therefore, It was recommended you use the X10 scale for testing semi's.

Modern DVMs use a constant current source to power the ohms readings, so there is no chance of blowing the junction.

>2) Similarly, is there anyway you can damage your DMM other than

I blew up a meter by trying to measure the HV on a microwave oven (~1500 V) Normally I use a resistor divider, but it was buried some where, and I was in a rush, so I just twisted a 10 Meg resistor to the end of the meter probe, figuring this would be enough, but bang!, in an instant, I had a blown meter. Just as well, as that DVM eat batteries and was getting tired of changing them.

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Thu, 12 Mar 1998 13:53:19 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: ALAN KAUL <alan.kaul@worldnet.att.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5867] Re: Another off-topic science report  
Message-ID: <Pine.LNX.3.95.980312134346.3453Y-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, ALAN KAUL wrote:

> The asteroid that might hit Earth in 30-years is a hot topic with nothing  
> to do with qrp Amateur Radio -- but this list is the only way I have to  
> tell so many of my friends about something that I think is absolutely  
> remarkable on the Internet.

Yeah, it does. I wonder how many satellites the thing might take out.  
That's the first time that anyone has brought this point up on the  
internet.

Think about how many radio operators were put out of work when cw was discontinued as a mode on vessels. Now, think about how dependant they've become on satellites. Can they navigate without GPS ? Can they communicate without uplinks ? Are they using any bands that might be affected by a

meteor strike ? What if the thing falls into the ocean ? You know, there are over 8000 sats in orbit right now. If a meteor were to strike only one, it's possible that it could fod out quiet a few others on it's way down. Nuts and bolts doing 80000 miles per hour can do a bit of damage, especially if you consider that satellites aren't built to withstand that type of impact from anything. Could be a real communications nightmare. Now, think about where you and Ham radio might be in 30 years. Think about fly by night radio ops who can't pass simple traffic, but seem to find the best porn sites on the internet. There's quite a bit of this related to ham radio. All it would take would be one simple explosion in space, to completely wipe out comms. There's alot going on. 73

-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
http://www.diaisdn.net/user/cdlevin

-----  
Date: Thu, 12 Mar 1998 13:38:53 -0500 (EST)  
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>  
To: qrp-l@Lehigh.EDU  
Subject: [5868] RE: DK3  
Message-ID: <49134.owen@piper.eeel.nist.gov>

In message Thu, 12 Mar 1998 11:30:16 -0600,  
"Jeff M. Gold" <JGold@tntech.edu> writes:

>How automatic is it?  
It's not it's manual

> How does it know when you switch bands to tune,  
It doesn't.

> and how does it know when the SWR is ok?

It doesn't.

It, as I understand it, is a motor driven coil. By using the DPDT switch you run the wiper up and down the coil changing the inductance. With an SWR bridge at or in the rig or even remoted at the base of the antenna with low power (a couple of watts) you run the wiper up and/or down the coil until

you get the lowest SWR. Same as changing the taps on a bug-catcher except it done remotely and is infinitely variable.

72 Jim K4CGY qrp-l #72

-----  
Date: Thu, 12 Mar 1998 10:50:30 -0800  
From: Bob Bayha <rbayha@ix.netcom.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5869] Re: Thankyou  
Message-ID: <35082E75.5527EDC3@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Well said, Doug.... Chuck is always willing to answer my questions... both on and off the list... really, really appreciated!

Bob, K6RKB

Hendricks, Doug wrote:

> Chuck, I just wanted to take a moment and say thank you for all that you do  
> for QRP

-----  
Date: Thu, 12 Mar 1998 11:56:23 -0700  
From: tom whalen <whalen@swcp.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5870] sorry  
Message-ID: <35082FD7.413D@swcp.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Sorry folks, sent my requests to qrp-l server instead of listproc....fingers are faster than the mind!! Tom WB5QYT

-----  
Date: Thu, 12 Mar 1998 14:53:22 -0000  
From: "Bob Duckworth" <wb4mnf@atl.org>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [5871] Re: Diode arrowhead  
Message-ID: <199803121839.NAA06336@atl.org>

The earliest diagrammatic 'pointy thing - flat thing' diodes I've seen in the literature accompanied a description of the carborundum diodes mentioned below and were drawn with the pointy thing kinda scraggly and looking a lot like a hunk of rock! So, this is how I think the present day representation came to be. It's just a slightly more stylized version of the original depiction of the carborundum 'crystal' diode.  
The potential difference across this diode agrees with present day (dare I say current) diode icons.  
-bob

For our next story, "How the cat got her meow."  
(graphic violence and sexual content, parental discretion suggested)

| It's that way because the carborundum detectors were  
| physically built that way. Little chunk of carborundum with the  
| point pressed against a metal plate. Approx 5lb pressure.  
| Usually had a spring in them :-)  
|  
| We'll that's MY theory anyway .  
|  
| -bob  
| wb4mnf  
|  
|

-----  
Date: Thu, 12 Mar 1998 14:06:04 EST  
From: ARDUJENSKI <ARDUJENSKI@aol.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5872] QRP ARTICLE?  
Message-ID: <df0fb66.3508321e@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Over the past many months I have read scores of testimonials regarding how both QRP-L and QRPing has renewed and/or peaked their interest and involvement in ham radio. IMHO I believe having folks submit their "testimonials" to a collection point to be submitted as an article to one of the magazines would allow other outside the group to see that the true spirit of ham radio is still very much alive today as it was decades ago. I can attest personally that my growth as a ham due to the association with this group has been



nothing short of phenominal.  
Alan KB7MBI

-----  
Date: Thu, 12 Mar 1998 12:10:35 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: ki6ds@dpol.k12.ca.us  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5873] Re: Thankyou  
Message-ID: <Pine.SOL.3.91.980312120328.23702A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998 ki6ds@dpol.k12.ca.us wrote:  
> Chuck, I just wanted to take a moment and say thank you for all that you do  
> for QRP. QRP-L is the prime mover in QRP circles today, and it all started  
> because of an idea that you had 5 years ago.

I SECOND THAT!!!  
Not sure why all of a sudden this is "pick on Chuck day" ... but he  
does definitely deserve the kudos \*everyday\*

> Keep up the good work, and I am very  
> proud to count you among my closest of friends. 72, Doug, KI6DS

ANOTHER DITTO!

72, Paul NA5N

-----  
Date: Thu, 12 Mar 1998 19:21:16 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: pharden@aoc.nrao.edu  
Cc: qrp-l@Lehigh.EDU  
Subject: [5874] Re: Thankyou  
Message-ID: <199803121921.TAA15255@chuck.dallas.sgi.com>

Hmmm,

Thanks guys. I haven't seen the pick on Chuck notes.  
Could be they are being sent behind the scenes. It

happens. Comes with the territory.....

I'm along for the ride and what a ride it has been.  
The time has really rushed by. So many projects and  
so little time.....

Back to your regularly scheduled spell checking in  
progress..... and math.....

dit dit

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Thu, 12 Mar 1998 13:39:37 -0600  
From: Dave Sjolín <sjolin@swbell.net>  
To: kd4zkw@amsat.org  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5875] Re: Another off-topic science report  
Message-ID: <350839F8.6F9E583A@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

kd4zkw wrote:

>  
> On Thu, 12 Mar 1998, ALAN KAUL wrote:  
>  
> > The asteroid that might hit Earth in 30-years is a hot topic with nothing  
> > to do with qrp Amateur Radio -- but this list is the only way I have to  
> > tell so many of my friends about something that I think is absolutely  
> > remarkable on the Internet.  
>  
> Yeah, it does. I wonder how many satellites the thing might take out.  
> That's the first time that anyone has brought this point up on the  
> internet.  
>  
> Think about how many radio operators were put out of work when cw was  
> discontinued as a mode on vessels. Now, think about how dependant they've  
> become on satellites. Can they navigate without GPS ? Can they communicate  
> without uplinks ? Are they using any bands that might be affected by a  
> meteor strike ? What if the thing falls into the ocean ? You know, there  
> are over 8000 sats in orbit right now. If a meteor were to strike only  
> one, it's possible that it could fod out quiet a few others on it's way  
> down. Nuts and bolts doing 80000 miles per hour can do a bit of damage,  
> especially if you consider that satellites aren't built to withstand that

> type of impact from anything. Could be a real communications nightmare.

Also, think what would happen if a close encounter caused an electro magnetic pulse in the atmosphere. Then all of the transmitters and receivers, computers and telephones using solid state devices would be history. Only people with boat anchors would have any communications. Oh, I knew I needed an excuse to buy a KWM-2A (but I am not sure I want to bury it in a shielded container in preparation for the apocolypse).

73 de Dave, N0IT

-----  
Date: Thu, 12 Mar 1998 11:47:02 -0800  
From: "Alan Kaul" <alan.kaul@worldnet.att.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [5876] more asteroid sites including moving pix xf11  
Message-ID: <19980312194617.AAA10791@default>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

want to see animation of the new XF11 - try this site (and wait for it to load, some browsers might not play it)

at Univ of Washington

<http://www.astro.washington.edu/deutsch/misc/asteroid/>

at Univ of Arizona

<http://www.lpl.arizona.edu/spacewatch/>

73/72 de alan

Alan Kaul, W6RCL, LaCanada, CA  
w6rcl@amsat.org  
<http://home.att.net/~alan.kaul/qrp.html>

-----  
Date: Thu, 12 Mar 1998 12:48:41 -0700  
From: Larry East <w1hue@amsat.org>  
To: qrp-1@Lehigh.EDU

Subject: [5877] RE: Stuff for Sale  
Message-ID: <3.0.3.32.19980312124841.0091fb50@eloi>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Amazing... I have not received a single request for the unbuilt NorCal paddle kit -- even tho I listed it at \$30 including shipping! Guess the market has been completely saturated... :-)

Oh well, guess I'll keep it for 5 years or so and it'll probably be worth \$100!

-----  
Date: Thu, 12 Mar 1998 14:59:18 -0500  
From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>  
To: sjolin@swbell.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5878] Re: Another off-topic science report  
Message-ID: <35083E95.21543A9D@gly.fsu.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Dave Sjolin wrote:

> Oh, I knew I needed an excuse to buy a KWM-2A  
>

Hey...Jody Foster had one, why shouldn't you?

-----  
Date: Thu, 12 Mar 1998 16:18:13 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: "Jeff M. Gold" <JGold@tntech.edu>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5879] Re: DK3  
Message-ID: <Pine.LNX.3.93.980312155712.1278C-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, Jeff M. Gold wrote:

> OK, I will admit, I just can't figure it out. How, exactly does the DK3  
> work. How automatic is it? How does it know when you switch bands to tune,  
> and how does it know when the SWR is ok?

The short answer is, it doesn't. There is an up/down switch, and a motor varies the length of the coil based on whether you run the coil up or down (up=longer, down=shorter). If you can see the coil in the rearview mirror you can mark the settings with tape and after changing bands, run it up/down to the correct height. This assumes you "preset" the antenna with an SWR meter before hand and marked the band locations. The ICOM706 and 735 have built in SWR meters and you can tune using that. NF3I has a 706 and a screwdriver on his Neon, so maybe he can elaborate on this some.

But you bring up a good point, because it is possible to do something like the LDG tuner does, and have it seek an "automatic" match. Definitely wouldn't be as quick. Anyone want to design a "magic box" for the DK3? If I had more time I'd look at the schematic of my LDG and try it. Seems simple enough, measure the SWR and tie it to a relay to drive the antenna. Hmmmm... how would you know which way was the "right " direction. If someone does design on I know about 40 people on QRPL who might be interested in one <grin>.

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --  
-- N3XRV ARRL-VE QRP WAS 28/13(w/c) | http://dns.vidtel.com/~ccart --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --

-----  
Date: Thu, 12 Mar 1998 20:27:20 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-l@Lehigh.EDU  
Subject: [5880] Thanks a Lot  
Message-ID: <199803122027.UAA15541@chuck.dallas.sgi.com>

Gang,

Please, let's not get the tread started. I appreciate it a lot.  
Thanks to Doug Hendricks for his post and the followups from  
Paul Harden et.al.

But, I can not take credit for something that

- a. Would have eventually been done
- b. Can only survive and grow with the people that belong to the group as a whole
- c. Not one individual and especially me can do without the continued contribution of many

I truly think that QRPers are the best. I have gained more from the new friends that I've found through this group and furthered my interest and love for the hobby that I could not have gained any other way.

It is a double edged sword. We have all become somewhat spoiled and lest we lose sight of the big picture - remember we still have the club meetings, the contests, the newsletters, the books, the workbench, and all the other areas to work in also and get information. Instant or almost instant access is sometimes a bad thing on the Internet. As most have witnessed over the years the wealth of information and sometimes the lack of information really generates a lot of words and lines on the screens. But I bet the typing speeds and the reading speeds have gone up significantly also. :-) And the number of clubs and newsletters like QRPP, The Lowdown, and others that have 'sprung up like weeds' and the quality of the work certainly should be a testament to the rest of the community that if everyone can keep a positive and friendly attitude there is no limit to the accomplishments and the good for the group at large.

We all have seen the renewed interest(s) in radio amateurs both new and old, licensed and unlicensed, young and elderly, .... But the thrill of having actually built and operated on something that we have put the time and energy and money into (and if we adjusted for inflation we'd all probably be pleasantly surprised that a new single band CW rig today is really much cheaper and better than the 'old days') is what it's all about IMHO. And the fact that we do it with less money, less room, less power, but with more enthusiasm, more energy and vigor, and with a smile on our bright and shiny faces outta tell someone something. Even in the worst of times this group somehow comes up with a laugh and a smile and then the problem doesn't seem as bad as it was. It's like being a kid again.

Just to list a few growth areas in the last few years that we've all been a witness to:

1. Memberships are up in clubs
2. New clubs are numerous and still being formed

3. Old clubs are regenerated
4. New kit manufacturers abound and with new and exciting products
5. The QRP frequencies are in demand
6. We've seen so many newsletters old and new get bigger and better and so much information yet to come  
So many pages and so little time
7. Less time in front of the TV, just in front of another screen do we spend more time :-) I see the mail when you don't get QRP-L for a few hours; you think the Internet has crashed and burned..... :-)

I think the rest of the community is starting to pay attention. We must be onto something good. Look at the good publicity in QST, CQ, RadioWorld, 73, NCJ, and the others.

No gang, it's the Dougs, Jims, Johns, Pauls, Floyds, Bruces, Lauras, Eds, Oris, Waynes, Bobs, Nils, ... and too many other names that the old brain can't list and recall in a few minutes time, it takes hours to go down the list of who is who, that make up the progress that we've made. The kits, the contests, the postings, the help wanted and received, and you add to the list and you'll run out of pages.....

I'm just thankful just to be along for the ride.

Again, many thanks and everyone stand up and shake hands with the next person and repeat after me,

"I'm proud to be a QRPer and I'm glad to be alive"

And when you get home, if you're not there, or if you are home: go over to the SO (significant other) and give them a big TX sized hug from yourself and the QRP-L gang and say a big Thank You for the quality time and for the lost hours to them and for their support. We all need their support too.

You are not alone. I like to think of us all as friends and neighbors on the third rock from the sun with spots. Let's all stay together and work together and the growth will come.

Looking to meet each and everyone of you some day. If not in person then on the air, just listen for the weak signals and work 'em one and all.

End of pep talk.

dit dit

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Thu, 12 Mar 1998 16:30:52 -0500 (EST)  
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>  
To: Chris Cartwright <ccart@dns.vidtel.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5881] Screwdriverama  
Message-ID: <Pine.LNX.3.95.980312162739.11122C-1000000@w3eax.umd.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

To get all the way from one end of the antenna's travel to the other can take a good minute.

It would be potentially injurious to the radio being used to test for SWR to be operating into a nearly infinite SWR over this entire range.

Once near a minimum SWR, "which way is the right direction to tune?" is a tough question indeed. Also, remember that surrounding buildings, trees, trucks and cars will affect your SWR considerably as you drive.

Remember, however, that 2:1 means only 11% of your power is wasted. Given only 10' of feedline, this is an acceptable loss.

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*  
\* 6m 82 grids on 8w \* DXCC WAS WAC \* QRP-L #147 \* QRP ARCI #9054 \*  
\* <http://w3eax.umd.edu/~ham> \* ARRL Life Member /Laurel ARC/UMARA \*  
\*\*\* 301-549-1022 h 301-982-1015 w \*\*\* 35 wpm HF mobile CW Neon \*\*\*

-----  
Date: Thu, 12 Mar 1998 13:46:23 -0500  
From: Ed Tanton <n4xy@bellsouth.net>  
To: kd4zkw@amsat.org  
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [5882] Re: Another off-topic science report  
Message-ID: <3.0.1.32.19980312134623.00b4dc10@mail.atl.bellsouth.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Not to mention the very real possibility of a solar flare (or whatever) of





> Think about how many radio operators were put out of work when cw was  
> discontinued as a mode on vessels. Now, think about how dependant they've  
> become on satellites. Can they navigate without GPS ? Can they communicate  
> without uplinks ? Are they using any bands that might be affected by a  
> meteor strike ? What if the thing falls into the ocean ? You know, there  
> are over 8000 sats in orbit right now. If a meteor were to strike only  
> one, it's possible that it could fod out quiet a few others on it's way  
> down. Nuts and bolts doing 80000 miles per hour can do a bit of damage,  
> especially if you consider that satelllites aren't built to withstand that  
> type of impact from anything. Could be a real communications nightmare.  
> Now, think about where you and Ham radio might be in 30 years. Think about  
> fly by night radio ops who can't pass simple traffic, but seem to find the  
> best porn sites on the internet. There's quite a bit of this related to  
> ham radio. All it would take would be one simple explosion in space, to  
> completely wipe out comms. There's alot going on. 73

>  
>  
> -----  
> | Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
> | http://www.diaisdn.net/user/cdlevin |  
> ~~~~~  
>

--

=====  
Mike Watson, W0TMW, QCWA Mbr # 28651, Chap. 35  
Raymore, MO USA Grid: EM28st  
<http://www.sky.net/~crucis>  
E-mail: [crucis@sky.net](mailto:crucis@sky.net) ARS# 352, QRP-L# 1489  
=====

-----  
Date: Thu, 12 Mar 1998 15:01:52 -0600  
From: Kevin Muenzler <[wb5rue@stic.net](mailto:wb5rue@stic.net)>  
To: "'Low Power Amateur Radio Discussion'" <[qrp-l@Lehigh.EDU](mailto:qrp-l@Lehigh.EDU)>  
Subject: [5884] Elmer's Code  
Message-ID: <01BD4DC7.EC9EC260@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

1. Many people learn by example, be a good example.
2. There is no such thing as a Dumb Question.
3. Encourage those in your tutelage to ask the question.
4. Everyone who asks the question deserves a straight answer.
5. Never laugh at the question, no matter how elementary.
6. Open your bench and tools to the use of your student.

7. Throw in some of your own parts now and then.

please add to this list

Kevin, WB5RUE

-----  
Date: Thu, 12 Mar 1998 16:14:15 -0500  
From: Thomas Jennings <jennings@eng14.rochny.uspra.abb.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5885] Re: DK3  
Message-ID: <35085027.BC79CA01@eng14.rochny.uspra.abb.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi,  
I was thinking of getting the plans for the DK3 and building it  
my self. Has anybody done this? I would be interested in  
your results and the difficulty of building one.

73,

Tom, kv2x

-----  
Date: Thu, 12 Mar 1998 16:08:47 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: crucis@sky.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5886] Re: Another off-topic science report  
Message-ID: <3508790F.E4258194@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Mike - W0TMW wrote:

> That's all Low Earth Orbit stuff. What about all those sats in

> equatorial orbits. They have to congregate in LaGrange point to  
> minimize drift. If they got hit, why (gasp!) there might be no TV!  
>

Of course, with no atmosphere, no mammals, etc. -- it may not be missed.

-----  
Date: Thu, 12 Mar 1998 13:18:34 -0800 (PST)  
From: "Allan G. Taylor" <ataylor@heracles.llnl.gov>  
To: qrp-1@Lehigh.EDU, tentec@contesting.com  
Subject: [5887] 599ZX DSP is SOLD  
Message-ID: <199803122118.NAA11727@heracles.llnl.gov>

The Timewave 599ZX DSP unit I posted earlier today is now SOLD.

See ya in the pileups.

Grant/K7GT

-----  
Date: Thu, 12 Mar 1998 16:30:07 -0500  
From: Mel Evans <MelEvansGM6JAG@compuserve.com>  
To: qrp-1 <qrp-1@Lehigh.EDU>  
Subject: [5888] Elmer 101, RF probes  
Message-ID: <199803121630\_MC2-3684-AA8E@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Hi guys and gals,

Note that in many cases, no matter what design of RF probe you go for, you  
u  
will most likely NOT be using it for absolute measurement purposes, but  
instead for comparative measurements, i.e. to look for an increase or  
decrease in a stage in a rcvr or trsmtr stage or stages. =

Where this is the case, then you will be better off using the probe with  
some form of analogue meter rather than a digital meter if one is availab=  
le  
to you. The obvious reason for this is simply the sampling time of digita=

1  
meters is too "slow" to enable you to see a peak or a dip. In this case, =  
a  
simple rf sniffer connected to a 100uA movement is likely to be of great  
help if you don't have an old Avo 8 (Simpson? in American) to see the  
needle moving.

72 and 73 de Mel  
GM6JAG  
Edinburgh, Scotland UK.  
Home of the last HW9

G-QRP 1283 EA-QRP 88 ARRL and the likes

Area Chairman, British Caravanner's Club, Scotland.

-----  
Date: Thu, 12 Mar 1998 15:31:35 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: wb5rue@stic.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5889] Re: Elmer's Code  
Message-ID: <35085437.CD7019E6@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Kevin Muenzler wrote:

- >
- > 1. Many people learn by example, be a good example.
- > 2. There is no such thing as a Dumb Question.
- > 3. Encourage those in your tutelage to ask the question.
- > 4. Everyone who asks the question deserves a straight answer.
- > 5. Never laugh at the question, no matter how elementary.
- > 6. Open your bench and tools to the use of your student.
- > 7. Throw in some of your own parts now and then.

>  
> please add to this list

8. Admit when you don't know, then say, "Let's go find out."

>  
> Kevin, WB5RUE

--  
=====

Mike Watson, W0TMW, QCWA Mbr # 28651, Chap. 35  
Raymore, MO USA Grid: EM28st  
<http://www.sky.net/~crucis>  
E-mail: [crucis@sky.net](mailto:crucis@sky.net) ARS# 352, QRP-L# 1489  
=====

-----  
Date: Thu, 12 Mar 1998 16:30:10 -0500  
From: Mel Evans <[MelEvansGM6JAG@compuserve.com](mailto:MelEvansGM6JAG@compuserve.com)>  
To: [qrp-l <qrp-l@Lehigh.EDU>](mailto:qrp-l@Lehigh.EDU)  
Subject: [5890] + & - ve flows  
Message-ID: <199803121631\_MC2-3684-AA91@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Hi guys and gals,

Been watching this post, liked Dale le Doux's last message. Dale and I are  
in the same business, both licensed up to 400kv.

One IMPORTANT thing to remember is it doesn't matter which way round you  
want the current to flow all that much, go with whatever is easier for you  
to remember, and also Mr. Fleming had a Right and a Left Hand Rule. Just  
remember enough of them electrons will do you an injury, and they won't be  
too fussy if they are zapping up your left arm, through the ticker  
mechanism and down the right arm, or going the other way round, up the  
right arm through the ticker bit and down the left!

By way of a diversion, it is a fact that cows/steers/cattle that get zapped  
in a field from say a faulty field pole will be usually ok if they are  
sideways on to the pole when the fault occurs, whilst those that are facing  
directly into or away from the pole will be almost invariably McBurger  
material. This is 'cos their bodies are so long that the front and back  
legs are up to 8 feet apart or more, and the voltage gradient created is  
enough to stop the heart.

It is also a fact that when the farmer makes out his claim against the  
power company, the beast that got it is always a (prize-winning/stud animal

worth a fortune/super record breaking milk producer/extremely rare  
imported) even though on inspection you can count it's ribs, and it looks=

like a refugee from the third world, but that's a different matter!

72 and 73 de Mel  
GM6JAG  
Edinburgh, Scotland UK.  
Home of the last HW9

G-QRP 1283 EA-QRP 88 ARRL and the likes

Area Chairman, British Caravanner's Club, Scotland.

-----  
Date: Thu, 12 Mar 1998 14:40:27 -0700  
From: Andy Fox <foxes@theriver.com>  
To: ccart@dns.vidtel.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5891] Re: It takes a super antenna and expensive equipment to QSO..  
Message-ID: <3508564B.20328714@theriver.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

All,

Sorry about the bandwidth, but I just have to drop my two cents' worth.

Don't forget Virginville and Blue Bell...

;-)

--  
-----  
Andy Fox, KK7HV  
mailto:foxes@theriver.com  
<http://personal.riverusers.com/~foxes/>  
-----

-----  
Date: Thu, 12 Mar 1998 14:42:07 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: qrp-1@Lehigh.EDU

Subject: [5892] New Virus HOAX (Yet Another One)  
Message-ID: <199803122142.0AA11400@usr01.primenet.com>

Howdy Folks,

Still away from email (sorry for my long silence),  
darn near drowning in work/schedules, but wanted to  
give everyone a heads-up. There's a new virus HOAX  
out there and wanted to "innoculate" List members.

The message screams at you to not read any email  
with "WIN A HOLIDAY" as its subject. Other than  
that, it reads just like the "GOOD TIMES" hoax.  
Please see <<http://www.stiller.com/holiday.htm>>  
for more info, as well as the Dept. of Energy's  
excellent site at:

<<http://ciac.llnl.gov/ciac/CIACHoaxes.html>>

Can you believe the security people at my division  
were the ones to send this latest hoax to my entire  
site's mailing list? Yeesh.

Again, this supposed "WIN A HOLIDAY" email virus  
is FAKE, PHONY, UNTRUE - it's a HOAX. Please spread  
the word where appropriate.

Sincere apologies for the bandwidth, but figured  
a stitch in time....

Hope to be back on email/QRP-L soon, best wishes  
and 72 to all!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It's hard to be unhappy when you have warm feet."  
- Dave Rose, Fellow Snow Camper

-----  
Date: Thu, 12 Mar 1998 16:34:20 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5893] Re: Another off-topic science report



Message-ID: <35087F0C.947E3DC7@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Just to put this into perspective -- the asteroid being discussed is approximately 2.9 miles by 1.5 miles by 1.2 miles in size.

The Barringer meteor crater in Arizona is estimated to have been made by a meteorite only 150 ft. in diameter.

The Chixulub crater (the one associated with the sudden demise of dinosaurs) was created by a meteorite estimated to have been only 6 miles to 12 miles in diameter.

Yep, could damage TV popularity!

Lyn, W4WDN

-----  
Date: Thu, 12 Mar 1998 14:58:56 -0700 (MST)  
From: Chris Trask <ctrask@primenet.com>  
To: LYN WILLIAMS <designserv@ipass.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5894] Re: Another off-topic science report  
Message-ID: <Pine.BSI.3.96.980312145810.26264A-100000@usr02.primenet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, LYN WILLIAMS wrote:

>  
>  
> Mike - W0TMW wrote:  
>  
> > That's all Low Earth Orbit stuff. What about all those sats in  
> > equatorial orbits. They have to congregate in LaGrange point to  
> > minimize drift. If they got hit, why (gasp!) there might be no TV!  
> >  
>  
> Of course, with no atmosphere, no mammals, etc. -- it may not be missed.  
>

"No more London, No more Paree:  
Lots of room for you and me."

- Tom Leher

[illegible]

# Circuit Design for the RF Impaired

Chris Trask / N7ZWY  
Principal Engineer  
ATG Design Services  
P.O. Box 25240  
Tempe, Arizona 85285-5240

Technical Editor,  
QRP Quarterly  
QRP ARCI 9464

Email: [ctrask@primenet.com](mailto:ctrask@primenet.com)  
<http://www.primenet.com/~ctrask>

Graphics by Loek Frederiks

Date: Thu, 12 Mar 1998 14:05:00 -0800  
From: Jeff Grudin <grudin@pacific.vdbs.com>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5895] RE: DK3 Antenna  
Message-ID: <35085C0C.1302@vdbs.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have some knowledge of this antenna. I have built one from scratch and have used it quite a bit under numerous circumstances.

So far it was one of my favorite projects to build. You really do need a good metal lathe to do the coil right. I was lucky enough to have a friend with one. If anyone wants more specific info about how to email me off the list. He sells a manual with instructions on his web page.

First off you don't tune the thing keyed up and running from one end of the coil to the other. The first thing you do is resonate it. With the rig on receive you run the coil up and down until the noise level increases (tremendously). At that point you are very close to minimum

SWR. Then you key up and make the final adjustment, barely bumping the switch. I can usually get close enough the first time to use it without the final tweaking.

It can usually get tuned to 1:1 with no tuner in less than a minute. After you get used to looking at it you will know how much coil for each band and you can even get close with the rig off. If you mark it you will be right on. One turn of the coil makes a big difference.

I have used this antenna mobile and worked alot of DX with my Sierra running 2 watts on 40M. I have used it for field day, camping, etc. It is a great antenna and I would highly recommend it. I do use a full size CB whip instead of the 66" one they recommend. This gives a little better performance but you cannot get it to resonate on 10M.

Don Johnson, has a circuit that can automatically resonate the antenna. I thought about building it, but found the antenna so easy to use that it wasn't worth the effort.

--

73 de Jeff AC6KW  
grudin@vdbbs.com

---

QRP-L #16	Private Practice : Companion Animals and
Exotics	
Norcal QRP #1292	Ocean Animal Clinic / Cat Clinic of Santa
Cruz	
	Santa Cruz,
California	

QRP'ers do it with less energy (but lot's of enthusiasm)!

---

-----

Date: Thu, 12 Mar 1998 17:27:27 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5896] Descriptions needed of 38 special, norcal 40-9er  
Message-ID: <Pine.LNX.3.95.980312172613.3453b-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Ca anyone tell me what these rigs are ? I've been offered a swap

and am thinking about it. tnx in advance.

-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
http://www.diaisd.net/user/cdlevin

-----  
Date: Thu, 12 Mar 1998 16:15:09 -0600  
From: Tellefsen Bob-CNSE97 <cnse97@lmps102.comm.mot.com>  
To: larsennc@alaska.net  
Cc: QRP-L list <QRP-L@Lehigh.EDU>  
Subject: [5897] Re: AL7FS finally hits a good night  
Message-ID: <351A2DFAE256D111883A0060B06B1662465246@s-il02-j.comm.mot.com>  
MIME-Version: 1.0  
Content-Type: text/plain

Jim:

Your list of dx stations you worked sure brings back memories. I was KL7SMC at Tok Junction on the Alcan back in '56-'58 at the top of the solar cycle at that time. Really hot conditions. I couldn't turn on the rig without working something DX.

Best memory is of a ragchew with me in AK, a station in Thule Greenland, a station at WWVH in HI, and a KC4 station at the South Pole. Lasted over an hour. I'll probably never do that again.

On the other hand, when we had a big beautiful aurora burst overhead, radio was dead for three days! Time for equipment maintenance, antenna building, etc.

Glad you are having such a good run.

73, Bob N6WG (ex KL7SMC) AKQRP #214 :-)

-----  
Date: Thu, 12 Mar 1998 17:27:15 -0500  
From: "Bob Edwards, W4ED" <w4ed@flash.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5898] Re: Screwdriverama  
Message-ID: <35086143.EC6AB90D@flash.net>

MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Scott Rosenfeld [NF3I] wrote:

>  
>... It would be potentially injurious to the radio being used to  
> test for SWR to be operating into a nearly infinite SWR over  
> this entire range.  
>

A very good reason to use a resistive bridge type SWR indicator,  
like in the ZM-2.

--

Bob 72/73

<http://www.qsl.net/w4ed>

W4ED nr Atlanta @EM73wt

...."QRP", more from less....

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Date: Thu, 12 Mar 1998 15:28:56 -0700  
From: Niel Skousen <nskousen@scientechn.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5899] FT-747 Schematic  
Message-ID: <199803122229.PAA10172@eaglerock.if.scientechn.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Hi gang...=A0 Anybody got a Yaesu FT-747 schematic that I can get a copy of=  
??=A0

Found one that needs fixing (4-8Mhz band dead, no local board (eg synth.)  
output)=A0 Will of course pay copy & mail costs...

TNX Niel

-----  
Niel Skousen: Sr.Eng, SCIENTECH.SPG/CFG/NUSI  
208.525.3742, 524.9229 FAX 529.4721 Idaho Falls ID  
nskousen@scientechn.com WA7SSA QRP-L.119

Z-----DN33wm--- . . . -

-----  
Date: Thu, 12 Mar 1998 16:44:22 -0600  
From: Tellefsen Bob-CNSE97 <cnse97@lmpsilo2.comm.mot.com>  
To: chunt@macromedia.com  
Cc: QRP-L list <QRP-L@Lehigh.EDU>  
Subject: [5900] Portable ant  
Message-ID: <351A2DFAE256D111883A0060B06B166246525F@s-il02-j.comm.mot.com>  
MIME-Version: 1.0  
Content-Type: text/plain

Hi, Christian

The telescoping 20' fishing poles are great for portable antennas. I used one last summer, where I cut a 33 ft piece of wire and ran it up the pole. Then let the remainder extend out sideways from the top. Used some thin nylon fishing line for support/insulation for the end. Makes an inverted L antenna. Needs a ground reference--a couple of radials if you are on 40m. On 20m and above, you can run out a few random lengths, as you will be feeding at a high impedance point, instead of low as on 40m.

Haven't used the ZM series tuners, but I've heard good things about them. Best thing to do is experiment a bit. Wire is cheap, the sun is shining. Go play antennas. :-)

73, Bob N6WG

-----  
Date: 12 Mar 1998 16:56:02 -0500  
From: "rohre" <rohre@arlut.utexas.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [5901] MFJ Ant. Analyzer GDO coils  
Message-ID: <n1322400664.82143@msmailgw1.arlut.utexas.edu>

Antenna gurus,  
Need some help from anyone having the MFJ Antenna Analyzers with the optional Grid Dip Oscillator coils kit. Have a couple of questions about the two coil kit that converts the instrument to emulate a Grid Dip Oscillator.

Please email direct to save list bandwidth.

Thanks,

72,

Stuart K5KVH

rohre@arlut.utexas.edu

-----  
Date: Thu, 12 Mar 1998 22:59:21 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5902] O-Scope Probes 10:1 100 MHz for trade.  
Message-ID: <350868C9.3386@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

If anyone needs a nice 10:1 O-scope probe I have many for trade.

I have some with/without the front clips and some with the ground clip as well.

I'm not looking for anything special. Maybe one of those Black Widow Poles for a portable antenna or whatever.

Spare the list and send email direct. I've got 15 probes or so to hand out!

I only need one.

All the probes are very usable. 100 MHz, 300 MHz (2 each) and some others of various scope capacitances from 10 to 35 pF.

-Ed

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Thu, 12 Mar 1998 17:28:57 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: LYN WILLIAMS <designserv@ipass.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5903] Re: Another off-topic science report  
Message-ID: <Pine.LNX.3.95.980312172821.3453c-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, LYN WILLIAMS wrote:

>

> The Chixulub crater (the one associated with the sudden  
> demise of dinosaurs) was created by a meteorite estimated to  
> have been only 6 miles to 12 miles in diameter.

Who's that guy with the dinosaur in his sig ??

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-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
| http://www.diaisdnet.net/user/cdlevin |  
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-----  
Date: Thu, 12 Mar 1998 18:07:39 -0500  
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5904] 2N2222 Receiver  
Message-ID: <3.0.1.16.19980312180739.2cbfaf48@mail49.mci2000.com>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii

Well you might know, the designer made a bit of a mistake in the previous post on the 2N2222 receiver. The r.f.amp isn't a common base, but a common emitter amplifier. My old brain, coupled with tired fingers let me down again! :-)

Several have asked for a schematic, and I'll keep the names and when I have a complete schematic drawn, I'll pass it along. With the MicroSim modelling program, I have models, and therefor schematics of each stage of the reciever, but no complete schematic, since this version of PSPIICE won't let you build big models. That's what you get with the \$15,000 version.

I just measured the current draw, and its right at 120 milliamps. Turning up the volume doesn't change it, because the output audio amplifier is essentially running class A. Burns a bit more power, but really low distortion.

As soon as I have more information to offer up, I sure will, and I'll be happy to publically answer questions that I receive that I think others on the list might be interested in.

If there is interest from the gang, I'll also sort out the actual stage models that went into the present configuration,



make them available on the qrp-l server if Chuck or Jim  
can put them there, or maybe they should go on the NorCal  
web page. We'll work on that.....

72 and TNX for the bandwidth.....Jim

P.S. I'm listening to the receiver as I type this. Sure  
sounds great!!!!

Jim Kortge, K8IQY (ex NU8N) | NorCal, QRP-L  
jokortge@mci2000.com | \_\_o H.F. bicycle mobile  
Fenton, MI | \_\<, Mizuho 17/40 SSB  
... .. (\*)/(\*) . . . . .  
NorCal 38S/30 Log - 34 States; 40 Countries - Running 3 watts  
Most recent - Iowa Mauritius

NorCal 38S/17 Log - 22 States; 51 Countries - Running 1.5 watts  
Most recent - Alaska Ecuador

-----  
Date: Thu, 12 Mar 1998 17:22:15 -0600  
From: jerrydeen@juno.com (Gerald A Huldeen)  
To: rerobins@newmail.uncc.edu  
Cc: qrp-l@Lehigh.EDU  
Subject: [5905] Re: Thankyou  
Message-ID: <19980312.172851.6542.1.Jerrydeen@juno.com>

Nobody can really appreciate the hours and thought you have put into this  
list, Chuck. I can only add my gratitude.

Jerry WB0T  
Sioux City, IA

On Thu, 12 Mar 1998 13:05:58 -0500 "Richard E. Robinson"  
<rerobins@newmail.uncc.edu> writes:  
>Doug, KI6DS, writes,  
>  
>>Chuck, I just wanted to take a moment and say thank you for all that  
>you do  
>>for QRP.  
>  
>Well said, Doug.

>  
>Thanks again Chuck.  
>  
>72,  
>  
>Rick kf4ar  
>  
>  
>  
>

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Or call Juno at (800) 654-JUNO [654-5866]

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Date: Thu, 12 Mar 1998 19:04:45 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: "Bob Edwards, W4ED" <w4ed@flash.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5906] Re: Screwdriverama  
Message-ID: <Pine.LNX.3.95.980312190134.3453d-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, Bob Edwards, W4ED wrote:

>  
> A very good reason to use a resistive bridge type SWR indicator,  
> like in the ZM-2.

I've heard alot of things about the zm-2. But, I know  
nothing about it. Isn't it a tuner/swr meter ? And if  
not, then does anyone recommend a good tuner/swr meter for qrp ?

If so, then where can I find more info about it ? Tnx.  
Btw, it's not about price, so much as about quality. If  
I am going to go qrp, I think the tuner is as important as  
the wattmeter, and the antenna. I'd like to think that  
getting scalped can be avoided, but I'm sure there's  
some stuff out there worth looking at that I haven't seen yet.  
OK, 73.

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| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |

| http://www.diaisdn.net/user/cdlevin |  
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End of QRP-L Digest 1027

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